Processing conditions as influences on task-based foreign language performance : a longitudinal study of communication strategies

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Processing Conditions as Influences on Task-Based Foreign Language Performance: A Longitudinal Study of Communication Strategies

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TO THE VICTIMS OF THE 1973 CHILEAN MILITARY COUP

Contents

CHAPTER ONE

AN INTRODUCTION TO THE DEVELOPMENT OF SLA STUDIES

SECOND LANGUAGE ACQUISITION STUDIES seem to have evolved and shifted from one major set of aspects of enquiry to another depending on the sequence of developments which are historically related to the growth of particular sciences such as *linguistics*, *psychology*, and *sociology.* These expansions or changes within the referred sciences have occurred in a chain reaction fashion, overflowing originally borderline areas, impelling new trends and establishing important points of contact which have transferred the new approaches into open alternative ways of research.

Since *linguistics* made claims to scientific status following Saussure's work, the orientation of language research has been *language and its internal structure*, perceived in terms of units, sentences, constituents, and parts-to-whole relations. The dominant school of psychology until 1955 or so was *behaviourism,* which basically projected into the field the belief that language consisted of 'externally conditioned habits'. The implications of such proposal for the second language learning perspective were then that the set of habits which constituted the first language would produce *interference* into the acquisition of the new set, and therefore were conducive to error, establishing what is known as the *Contrastive Analysis Hypothesis*. One of the pioneers in the propagation of this hypothesis was Robert Lado (1957) in America. His main interest being a pedagogical one, Lado believed that by listing the points in areas where languages differ it would be

possible to map the problem areas for learners.

However, the equation of linguistic difference and language learning difficulty took several years to be tested empirically. This was basically due to the fact that research with the actual examination of the language that the learners produced only came to the centre of attention with the increased status of the *language acquirer* as an active participant in the learning process. This in turn only came about with the Chomskyan Revolution.

Chomsky opened an alternative route to *second language studies* with his postulation of a set of innate principles for organising some sort of universal grammar mechanisms contained in the so-called *Language Acquisition Device*. It is hypothesized that this consists of an over-all organiser of linguistic input data which supposedly activated the child's built-in processing to help him acquire his first language. (Chomsky,1965)

Chomsky's argument rules out the idea that language is primarily determined by characteristics of the environment and emphasizes that any viable account of why people say what they say must be related to the mental construct activated by the language acquirer when exposed to linguistic information. Such a perspective stresses the role of the learner and downgrades the role of the external forces triggering imitation and reinforcement.

Chomsky specified in his revised version of linguistic theory (Chomsky,1965) that linguistics was related to a theory of cognitive psychology in the sense that it could account for the speaker-hearer's knowledge of his language, that is, his "linguistic competence". Chomsky, as a linguist, is concerned with the knowledge of language , which is in turn equated with the knowledge of grammar, the actual mental state attained by the language acquirer. In this respect the object of linguistic study is still language as a product. In the

Chomskyan framework, it is not within the scope of linguistic theory to explain how language is used meaningfully and appropriately on particular occasions.

> "Linguistic theory is primarily concerned with an ideal speaker-listener, in a completely homogeneous speech community who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance." (Chomsky,1965 : 3)

This distinction establishes the borderline between *competence* and *performance*, in other words, intrinsic knowledge of the language, and use of that knowledge. The latter would be the province of 'psycholinguistics', which "describes not only the processes that access and utilize knowledge stored in the language faculty, but also the way in which they interact with other psychological faculties and processes such as memory and attention." (Garnham,1985)

The Chomskyan revolution was the impulse for the proliferation of research in first language acquisition, with the idea of describing children's emerging language competence (Ervin,1964; Klima-Bellugi,1966; Brown,1973). The objective of such research was to provide empirical support for the Chomskyan proposals. In agreement with the model of linguistic analysis that derived from the theory, the assumption was that the syntactic level was central for description.

Two important generalizations could be singled out as relevant to future developments in the research of acquisition studies both in first and second language:

(a) the early utterances perceived in child language development appeared to be "unique" in the sense that they might be quite different in structure from the adult versions that served as 'input' models.

(b) the development proved to be continuous and incremental.

This was evidenced in the gradual increase of length in children's utterances

(from one-word to two, to three to four-word utterances) and the constant build-up of the grammatical system developed by "successive stages of approximations".

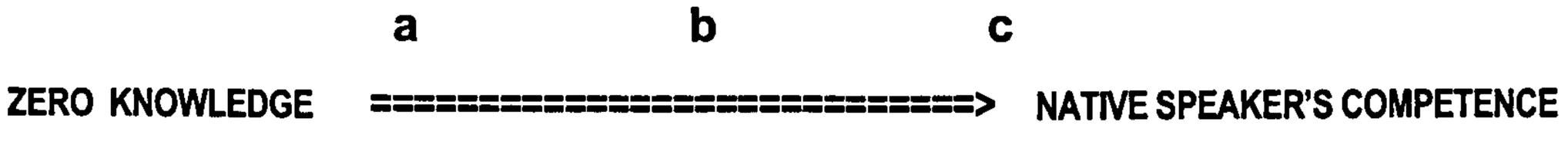
The first generalization served as evidence against the behaviouristic account of L1, in terms of 'imitation and reinforcement', providing at the same time support for the *creative* aspect of the child's internal processing. The second statement is related to what McNeill considered to be "the process of acquisition via 'hypothesis testing'. This concept captured the interesting fact that the learner tested the linguistic information which he was exposed to, during his acquisition stages, against his in-built grammar and shaped up his competence through developmental sequences until the final stage was reached. Such a hypothesis is connected with the understanding of a crucial factor involved in second language acquisition: the *transitional* character of the learner's 'competence'. With this principle in mind and extrapolating from the Chomskyan distinction between *competence* and *performance*, Corder (1967) produced "The Significance of Learner's Errors", a seminal article evaluating the essential questions relative to the second language learner. From the literature produced as a result of research in L1 acquisition, after 1960 (Brown-Bellugi,1964) there were countless instances of utterances that deviated from the adult system. It was the systematic character of these deviations which had taken people like McNeill to believe them to constitute "hypotheses by the child about the language to be learned." It was exactly this idea developed by L1 psycholinguists which Corder brought over to L2 acquisition. In his 1967 article, he made a reappraisal of the notion "error" and proposed this as being an equivalent by-product to the strategic behaviour used by L1 learners when testing out their hypotheses about the language being internalized.

Corder's claim came as a theoretical pronouncement contesting the view of "error" proposed by Contrastive Analysis and definitely set a new course for second language studies: a reappraisal of *error analysis.*

"The impact of Corder's work gave rise to a new field called error analysis because the emphasis was now on examining systematic errors in order to arrive at some description of the underlying rules that governed the learner's evolving interim grammar. The field of error analysis included within it the contrastive analysis of the structuralist grammarian along with new insights derived from the Chomskyan perspective. In addition, this new view looked at other possible sources of learner deviation from the target grammar that might have nothing to do with the learner's first language. The role of the first language was now questioned it could no longer be assumed to be the sole cause or reference point for errors.(Seliger,1988 :18)

Corder has pointed out the analogy of L1 and L2 learning in the sense that both types of learner would resort to similar *strategic procedures*. 'Errors', in both cases would be inevitable by-products of the learning task. It was precisely this systematic character of errors which began to appear with regards to first language acquisition, combined with the notion of competence that made Corder propose the term 'transitional competence' to describe the characteristic language of such learners. This presented the knowledge system of the language acquirer as a dynamic flow of changes and adjustments. Some of the problems in SLA research derive from this transitional nature of the learner's competence, making it difficult to evaluate the set of utterances in a given sample as either random occurrences or 'stabilized grammar rules'.

A similar construct to capture this aspect of 'incompleteness' of the learners' developing competence was presented by Nemser (1971) as 'approximative systems'. He views the learner as progressing along a continuum from 'zero' to a level close to native-like knowledge.



Larry Selinker followed closely the developments by Corder (1967;1971) and Nemser (1971) emphasizing the idea that second language learners actively and continually revise their underlying grammatical systems in their approximation towards the native-like competence. Selinker (1972) brought into the literature the

term '*interlanguage*', probably the most widely adopted coined expression in the field of second language studies.

Selinker, in his classical article, claimed for *interlanguage* the status of a system in its own right. Something which did not belong to either the *source language* (the learner's L1) or the *target language* (L2).

> "The new 'IL' paradigm was cognitivist, as already noted, and also somewhat more process-oriented. It viewed ILs as languages in their own right, legitimate objects of study whose evolution owed much to factors other than the shape of the target language. Consequently, adoption of the paradigm entailed development of data analysis procedures which would capture the dynamic qualities of language change within an individual. In a very real sense, therefore, both the recognition of ILs and the development of suitable methodologies for their study exemplify the emergence of 'applied linguistics' as an autonomous discipline." (Long and Sato, 1984: 256)

Selinker also presented a tentative description of what he believed to be the five central processes operating within the interlanguage systems, namely:

1. LANGUAGE TRANSFER, that is the transference of rules from the learner's first language into the production of L2.
2. TRANSFER OF TRAINING, that resulted from the learner's being overdrilled in a particular form in the second language class.
3. STRATEGIES OF SECOND LANGUAGE LEARNING, resulting directly from an attempt by the learner to cope with the material to be learned.
4. STRATEGIES OF SECOND LANGUAGE COMMUNICATION
5. OVERGENERALIZATION OF TARGET LANGUAGE RULES

For those learners particularly failing to develop certain linguistic structures which will remain "deviant" with respect to the target language structures on a permanent basis, Selinker suggested a stage called 'fossilization'.

Selinker's proposals have raised serious questions with regards to the five processes and there have been suggestions to conflate them under more general

processes. Such seems to be the case with 1, 2, and 5, considered to be types of some generic form of generalization related to 'hypothesis testing'. This seems applicable to 3 as well, while *strategies of second language communication*, as researchers in the strategies area have suggested, may or may not be related to acquisition processes.

Widdowson in an article on "The Significance of Simplification" (1975), has suggested that the five interlanguage processes are "tactical variations of the same underlying simplification strategies " (attempts to control the range of hypotheses being built by the learner, by restricting hypothesis formulation to those simpler to handle). But then, not all researchers agree on considering "simplification" a 'learning strategy' (Faerch and Kasper,1983), in spite of the fact that its delimiting role would seem to have some bearing on the learning process.

With Corder's and Selinker's work , second language studies had emphasised theoretical perspectives. Some of the questions posited needed to be further clarified if not settled by means of empirical research. The time was ripe for such an enterprise. One of the questions raised was about the nature of the interlanguage continuum.

> "Was the continuum to be conceived as stretching from the learner's mother tongue to the target language? Corder (1978) refers to this view as a **reestructuring continuum.** Alternatively, was the continuum to be conceived as the gradual **complexification** of the interlanguage knowledge? Corder refers to this as the **recreation continuum.** In the former view the learner is seen gradually replacing the features of the mother tongue as he acquires features of the target language. In the latter view the learner is seen as slowly creating the rule system of the target language in a manner very similar to the child's acquisition of his first language."
>
> (Ellis,1985:54)

The empirical challenge was basically taken in the early seventies by Dulay and Burt. Their research aimed at checking whether L2 learners followed the same order of acquisition as L1 children.(1973,1974a). Dulay and Burt (1974)

suggested that L2 learners are guided by 'universal cognitive mechanisms' which enable them to work out the rules in L2 in a sequential order of hierarchical complexity. Such mechanisms constitute the basic framework of what came to be labelled as the Creative Construction Process.

The Creative Construction Paradigm triggered an incredible amount of L2 research in the United States , with two basic claims in mind:

a) L1 and L2 acquisition require parallel strategies, and hence,

b) L2 acquisition is largely unaffected by L1 transfer.

Several studies, by and large, corroborated the same 'natural order'. Bailey, Madden and Krashen (1974) replicated the original studies with adults of a wider range of L1 backgrounds. Larsen-Freeman (1975) found similar orders on the oral production tasks (BSM), but variation with respect to the Dulay/Burt's orders in the listening, reading, and writing tasks. In a joint study, Perkins/ Larsen-Freeman (1975) got similar orders after researching the effects of formal instruction on the morpheme-order acquisition.

As an overall picture from the various research projects attempting to validate the 'creative construction' paradigm, the following generalizations could be made:

1) The acquisition order for various grammatical morphemes is more or less the same, regardless of L1, age, and production channel.
2) A different order occurs when the elicitation instrument required from the subjects to focus on form rather than on the meaning of utterances.
3) Where the data was focus on meaning, "there is an amazing amount of uniformity across all studies". (Krashen,1977)
4) The standard order reported for L2 studies was different from the order of morpheme acquisition found in L1 studies.

However conclusive the morpheme studies might have appeared, the "evidence" did not escape critical revision and a few interesting studies attempting to test the validity of the paradigm reported divergent views. The results of a longitudinal case study reported by Hakuta (1976) concerning 'Uguisu', a five-year old Japanese girl learning English, presented some significant differences which showed a much higher incidence of interference of L1. This particular case points out to the learner's L1 as one possible source of deviation from the so- called 'natural-order'.

Rosansky (1976) qualifies the morpheme studies in the sense that, being a cross-sectional sample, strictly speaking, they did not measure 'acquisition-sequence' , but rather 'accuracy of use' in obligatory contexts.

Another longitudinal study which yielded orders of acquisition contrary to the accuracy of use obtained in the cross-sectional samples was Huebner's (1979) who looked at the acquisition of the English article by a Hmong speaker.

SOCIAL AND PSYCHOLOGICAL FACTORS IN SLA

In contrast to the linguistically-focused research, other researchers emphasised more psychological and cultural factors for alternative explanations on SLA phenomena. Developments in the area of sociolinguistics and discourse analysis are concomitantly responsible for the change of appraisal in this respect. For example, Schumann (1975) initiated some pioneering work establishing a controversial analogy between early second language acquisition and pidginization. He analysed the modification of attitudes, knowledge, and behaviour of individuals with respect to either the addition of new elements to an individual's cultural background or the elimination of certain elements and the reorganization of others. This was labelled the 'ACCULTURATION' process.

Depending on the degree to which a learner adapts or "acculturates" to the

target language group will the degree to which the second language acquisition takes place be determined (Schumann,1978). The notion of 'acculturation developed along these lines is affected by the degree of 'social' and 'psychological' distance between the learner and the target language culture. Several concomitant factors interrelate in this version of Schumann's model, as illustrated by his famous case study of Alberto, a Mexican migrant worker in California. An analogy is established between the early stages of SLA and the formation of pidgin languages where there is a stagnation of development caused by either social hindrances such as great distance due to inequality, lack of assimilation to the TL group, cultural incongruity ; or psychological problems resulting from culture shock, low motivation,etc. In any case, the learner experiences a stop in progress beyond a given point.

An extended version of the 'acculturation' framework is proposed by Anderson's NATIVIZATION model. Anderson extends his model from the motivational factors discussed by Schumann to fit in with the role of 'internal processing mechanisms'. From his viewpoint, the outcome of second language acquisition is the result of the gradual tension of two general processes: *nativization* and *denativization*. 'Nativization' involves an "assimilation" on the part of the learner by making the *input* conform to his *internal norm*, an internalized view of what constitutes the second language system. This stage of the development operates along the lines with 'hypothesis formation' based on innate, language-specific knowledge.

Denativization involves an "accomodation" of the learner's internalized system to the *external norm* to make it fit the *input*. This process of growth towards the external norm presses the learner and causes him to override natural acquisition processes.

These two forces in different directions, following at one point the 'internal'

and at another the 'external' norm, characterize the gradual transition of the developmental sequence which has been observed in SLA and may account for the difference between early and later stages of interlanguage. From this perspective *nativization* results from restrictive access to target-language input. Time and exposure to the input would favor the approximation to the external norm.

The 'acculturation' and 'nativization' models seem to be operative within the context of L2 learners in contact with the target language community.

Two specific European projects follow the lines of these proposals: the Heidelberg Project and the ZISA Project. The Heidelberg Project studied the acquisition of German without formal instruction by 48 immigrant workers with a 50% ratio of Spanish and Italian L1 background. The sample was based largely on naturalistic data collection techniques and was designed cross-sectionally. The focus of this research was on the development of specific syntactic categories (preposition/verbal/ nominal/ adverbial complex, subordinate clauses) together with the development of word-order characteristics (especially the position of verbs, in affirmative, main and subordinate clauses).

The researchers developed an index of language development which was correlated with several social factors such as, age of entrance in Germany, duration of stay, length of education, mother tongue and sex, together with two contact variables: leisure activities and work contact. The highest correlation index with syntactic development was signalled by the two contact variables with Germans. Furthermore, individuals with the highest contact were those who had German partners. This situation of social proximity seemed to play a critical factor since it fostered better learning levels on account of access to input from native speakers. Subjects who appeared to have little contact with native speakers (reduced exchanges, and brief conversations in shops) were mainly industrial

workers showing great social and psychological distance from the community.

The ZISA Project (Zweitspracher Italienischer und Spanisher Arbeiter) was the other German research project with immigrant workers. The main researchers, J. Meisel, H. Clahsen and M. Pienemann (1981) aimed at linking social-psychological factors and linguistic aspects of second language development. Their model is meant to be multidimensional, in the sense that groups of learners vary in their paths to the target language. Two dimensions characterise the learner's trail towards the target language: the developmental stage, which is generally defined on the basis of linguistic criteria and the social-psychological orientation which depends on the learner's disposition towards the L2 community. The learner varies along a continuum which ranges along a *segregative* (negative adaptation) to an *integrative* (positive adaptation) orientation.

While the segregative learner is more likely to fossilize in his interlanguage, the integrative learner is prone to make the best out of learning opportunities, by making use of the most adequate learning strategy. Meisel discusses two varieties of *simplification strategies* with regards to the learner's tendencies: *restrictive simplification* and *elaborative simplification*. The first is involved in the omission of elements and morphology at the initial stages of development and is more characteristically retained in the following stages by segregative-oriented learners. The second appears further along the learning process and involves the formulation of hypotheses about rules applicable in the target language. Elaborative simplification is more frequently used by learners with an integrative orientation and is responsible for their greater progress.

The value of these models which emphasize the role of social and psychological factors in second language acquisition lies in the expansion of our understanding concerning the possible sources of variation in interlanguage

development. In addition, they provide alternative explanations for failure to achieve successful acquisition at reasonable communicative levels on the part of adult L2 learners due to their simple "cut-off" attitude from the necessary input available within the community of language users.

But probably the most interesting single-case study assessing non-native adaptation to a target language community, with the 'acculturation hypothesis' in mind, is R.Schmidt's (1983) study of Wes. This 33-year old Japanese decided to emigrate from Tokyo to Honolulu, attracted by the climate, the relaxed way of life, personalities with Japanese friends living there, and later on, prospectively good professional opportunities. The actual move from the Japanese to the Hawaian scene was gradual, beginning with an observation period, spending different times which increased from three to eight months during three years until the final resident status was achieved.

When Wes first arrived he had a minimal communicative ability. Nevertheless the one main characteristic which links him with Schumann's Alberto is his little or no interest in studying English formally. But he differs from Alberto in the sense that his concern was with communication not with form. He committed himself to learning English through natural interaction, while avoiding as much as possible any analytic study of the code itself.

On a global evaluation of Wes' overall communicative competence, he appears to have learned a lot. His ability to communicate in English increased steadily and quite impressively since he managed to sustain conversations with friends, acquaintances or even strangers, without running out of discussable topics or limiting his interlocutors' topics and without losing the thread of conversation. His comprehension, which at the beginning was limited to films with simple plots and lots of action, at the end included accurate summaries concerning characterization and plot development. However, there were clear limits reported

on Wes' communicative abilities as well, both receptively and productively. Wes could not read nor write very much English. But the most significant comment related to his grammatical competence, which he hardly improved during the three-year observation period. Grammar seemed to be Wes' major problem. Except in routine, formulaic utterances, Wes had no subject-verb inversion in questions (*ah! you has keys? *when Tim is coming?) no dummy or pseudo-subjects(*because here is nothing) no relative clauses(*you know before people bought my paintings, for, 'people who bought my paintings before') Negatives are the only generally well-formed items.

From the perspective of 'communicative functions', Wes demonstrated a reliance on speech-act formulas straight from the beginning. Since he was highly motivated to engage in interaction in general, he was able to develop considerable control of the formulaic language that smooths interactional exchanges. All in all, 'strategic' competence seemed to be Wes' greatest strength in his use of English; an aspect which definitely compensated for his weaknesses in other aspects of form and use.

From the perspective of language as a means of "initiating, maintaining and regulating relationships and carrying on the business of living", Wes was a good learner. From the perspective of language as a system of items, arrangements and rules, with syntax playing the major role, he was really a very poor learner.

Wes was aware of the fact that he used "funny English". All the same he was a different type of learner from many others with his same L1. But he was also different from Schumann's Alberto in his social distance to the culture and the environment.

Schmidt's major point in his study relates to Wes' failure to learn much of

the grammatical component, despite his social proximity factors. His low social distance, positive attitudes and high integrative motivation to use the second language for communication led to a considerable increase in his overall communicative competence but had had little effect on his grammatical competence: something which caused Schmidt to question the 'acculturation hypothesis'. A further point that could be made through the case is the partial independence of the grammatical component from the other components of communicative competence.

THE SOCIOLINGUISTIC ASPECT AND COMMUNICATIVE COMPETENCE

The emergence of the sociolinguistic trend in the late sixties brought with it some important modifications to the established Saussurean and Chomskyan models concerning the *uniformity* of grammatical systems. Two extremely important notions followed from the influence of the social perspective on language behaviour, namely, 'variability' and 'systematicity'. The realization of the importance of social factors in linguistic performance, provided the necessary grounds for a new interdisciplinary approach: SOCIOLINGUISTICS. The new approach triggered by the ideas contained in the seminal works of Gumperz, Labov, and Fishman, directed attention to the fact that there is no "ideal realization" of what people intend to say , but rather a whole range of ways, actual varying modes of expression, depending on the setting, the occasion and the group of people involved.

It was within context of sociologically-motivated factors such as variability in styles, and registers (Halliday ,1970) together with the influence of context, social setting, topic, participants, channel, etc., that Dell Hymes developed his ideas on COMMUNICATIVE COMPETENCE (1972). His major criticism was directed to Chomsky's original formulation of *competence*, which in Hymes' concept, was "far too narrow", leaving *performance* as a kind of 'odd carpet' under

which Chomsky had swept all the left-over phenomena he was not interested in coping with.

For Hymes, "there are rules of use without which the rules of grammar would be useless. Just as rules of syntax can control aspects of phonology, and just as rules of semantics perhaps control of aspects of syntax, so rules of speech acts enter as a controlling factor for linguistic forms as a whole." (Hymes,1982: 278).

Hymes expanded the notion of *competence* adding more-socially-based aspects to the 'purely individual' character of the previous models. In a way there is an integrative aspect in this addition of the functionally concerned social dimension, to the formal linguistic aspect of communication. Thus, COMMUNICATIVE COMPETENCE is extended beyond the concept of grammaticality of the system to the concept of 'appropriateness' of language use.

Since the early seventies, various attempts have been made to look into the nature of *communicative competence*, as opposed to *linguistic competence*, with the intention of applying such research to the second language learning situation. Valuable contributions were made by linguistic "philosophers" , among whom, Austin (1962) is usually referred to as a prominent contributor. His interest in viewing communication in terms of what the speaker is trying to accomplish in using language, beyond the simple issuing of 'statements' sets the dividing line between the propositional value and the 'illocutionary force' of speech acts,as Austin labelled them. This line of enquiry was successfully brought forward by his disciple John Searle (1969) who actually set the framework for a whole theory.

Any kind of communicative situation is bound to the fulfillment of an "act" performed by the interactants in order to achieve definite goals, since communication always has a purpose. Through verbal interactions we express our thoughts, make requests. give authorizations, make promises, offers, apologies,

try to convince, recommend, invite, etc. The speaker tries to accomplish something by using language. Searle tried to narrow down the numberless possibilities of intentions proposed by language users into a set taxonomy of an operative number of major functions. A representative illustration of such framework is the following:

1. REPRESENTATIVES: Expression of belief or credibility concerning the 'state of affairs' referring to the world. (i.e. asserting, predicting, describing, certifying, admitting, agreeing,etc.)
2. DIRECTIVES: Expression of a desire concerning an action to be taken. (i.e. requesting, ordering ,suggesting,etc.)
3. COMMISIVES: Expression of an intention to undertake a commitment associated with a specific action. (i.e. promising offering, proposing, guaranteeing,etc.)
4. EXPRESSIVES OR EVALUATIVES: expression of a personal evaluation towards some past action or event.(i.e. apologizing, condoling, complimenting, greeting, thanking, etc.)

(Fraser, 1983)

Each of the proposed major functional categories can be further subdivided. And as with the case of all taxonomies there are certainly 'hybrid acts' which result in overlapping depending on the perspective taken to analyze the discussed intentionality or 'illocutionary force' of the proposed *speech acts*.

Simultaneously, linguists who had been on the revisionist end of the Chomskyan theory were exploring issues in connection with the relations between syntax and semantics in general (Katz, Postal(1964); Ross(1970); Fillmore(1971)) such as the correspondence between sentence structures and sentence uses, in other words, the pragmatic potential of sentences. These concurrent approaches signalled one possible new route for language studies under the label of *Speech Act Theory.*

An alternative route was the one taken by those interested specifically in the study of language use, away from the exclusively bottom-up approaches of the linguistic-oriented scholars. The criticism was that linguistic descriptions of the problem only concentrated on the internal structure of language and not on its external uses, as discussed by Hymes. Their central interest was in the speech event, working top-down, from the categories of communicative events to the functional types that characterize them. This was the trend inaugurated by Gumperz, Labov, Hymes, Schlegloff among others, within a perspective that came to be recognised in language studies as *discourse analysis*

This kind of polarization is a typical characteristic mark of reactive research as a whole, with a tendency to privilege one aspect of an issue at the expense of others.

One major dividing line between speech act theorists and discourse analysts is the concept of the *act of communication*. Communication is seen as a dialectic between *social* and *individual* knowledge. While speech-act theorists center their analysis on attributing "meaning" to the "potential" use of sentences (generalizations about the meaning of linguistic items which have no referential value), discourse analysts try to account about the ways in which utterances are linked together, the focus being on language use and the interactive pair. The first type of concern is on more static, decontextualized language; the second is more dynamically , communicatively, real-language-use oriented . This new outlook breaks away from the traditional attempts to define communication within the limited view of sentence-level analysis as the maximum reference within a unitary view of meaning.

The idea that in real life language users produce utterances and not "sentences" (abstractions made by grammarians to account for linguistic

descriptions), project the external relations of utterances, units conceived for the description of behaviour and part of a communicative event. Such is the domain of discourse analysts where the perspective concerning meaning trascends the singular interpretation, since the architexture of such a notion is the result of a construct either of one individual negotiating with another or with a group, in the creation of a "unified discourse". The exchanges of the collaborative participants working out together meaning from their interactions is projected from specific knowledge sources, namely :

(1) knowledge of the linguistic code-vocabulary and grammar;

(2) knowledge of the world, including knowledge about our interlocutor and his own knowledge; and

(3) knowledge of the rules for relating 1 (the knowledge of the system) and 2 (non-linguistic knowledge)-procedural or interpretative rules. (Riley, 1985)

The implication of this notion of meaning is that ,on the one hand, it depends on the sense of everyday use of the word, and on the other, it is the product of a negotiation. The first one has a semantic (symbolic) implication and the second, a pragmatic (indexical) value.

The main contribution postulated by the sociolinguistic dimensions of this framework lies in this concept of *communication*, in terms of an 'activity' where meaning is the result of a negotiated interaction between interlocutors. From the analysis of the units constituting the code, we go through a communicative event which is interpreted in terms of the contextual values that arise from the situation in which the language users are involved. Such values are derived from 1, 2, and 3 above. Thus there has been established a transition from the linguistic, formal character of the code towards the behavioural-pragmatic character of the event.

This concept of negotiation of knowledge , proper of the interactive nature of the communication process conceived along the sociolinguistic lines, has an

important repercussion for applied linguistics interested on second language acquisition processes. Two important issues are linked to these developments, as pointed out by Riley (1985:10):

1. the negotiation of old and new knowledge between two or more participants engaged in an interaction, and;
2. the negotiation of old and new information within the individual, the extension of his cognitive categories.

These topics correspond with two relatively new areas of applied linguistic research on second language acquisition, *communication strategies* and *interlanguage*. The following two chapters of this study concentrate on these two complex issues and the relationships between them.

CHAPTER TWO

THE DEVELOPMENT OF INTERLANGUAGE RESEARCH

One typical question posed at the early stages of SLA research was related to what it was that L2 learners actually acquired in their attempts to learn a target language. This question was motivated by the fact that learners presented a series of errors during their acquisition process which were significantly different from the correct target forms. The aim of this type of research was to describe occurrences of regularities and irregularities in learner language. At a second stage and due to the development of neighboring disciplines such as psycholinguistics and sociolinguistics, one of the concerns was with the role played by social factors such as exposure to language and the negotiation of meaning. Another concern was the role played by mental processes in the convertion of input into knowledge. The actual use learners made of creative devices for coping with communication problems triggered research in communication strategies. But the major challenge for SLA research has been to account for both external and internal factors and their interrelation in learners' acquisition.

Four major areas of interest in SLA research could be characterized through time: **(1) the description of learner language; (2) the learner's acquisition process and development; (3) variability of learner language, and (4) the study of the learner's use of language in communication.**

The first area provides interesting insights regarding theories about L2 acquisition. Pioneering research in this area, as seen in Chapter One, is found in Corder's analysis of learner's errors. In the second problem area, some longitudinal case studies of individual learners (Huang,1970 and Wode 1976;) presented some evidence for developmental sequences, but the most conclusive evidence in support of developmental sequences in L2 acquisition is provided by the the ZISA project, (Meisel Clahsen and Pienemann,1981). The discovery of developmental sequences is probably one of the important contributions to SLA research, but unlike Pienemann's expectation that progress will be a steady progressive line, SLA research (Kellerman,1984 ; Ellis,1985 ; Cook, 1994) shows that learners are forced by current changes in the system to continually re-evaluate the features of their interlanguage and change them back and forth. The importance of the third problem area lies in the fact that learner's variability has been shown to be systematic and is essential to explain how learners organize their L2. The last area covers what has been labelled *discourse pragmatics* and covers learners' perception of speech act realization, yet very little is known about how pragmatic competence is acquired.

Towell and Hawkins (1994:5) point out at least five core areas of observed L2 behaviour for which a theory of SLA must account :

(1) L2 learners bring to their language learning process more than one linguistic system together with other linguistic knowledge sources available to them.

(2) Language development in SLA goes through stages.

(3) These developmental stages would be systematic and nonsystematic.

(4) L2 learners on the whole will not reach the same level of completeness as native speakers in relation to the intuitive knowledge of the language.

(5) L2 learners present variable stages of knowledge throughout their acquisition phases.

SLA research based on the proposals of *Universal Grammar theory*, claims that L2 learners bring to their learning experience some innate linguistic

knowledge which guides them to make reasonable hypotheses about the way language operates. The activation of this knowledge, some sort of a universal grammar, alongside psychologically determined representations, has contributed valuable information concerning language development. An internally derived hypothesis such as Universal grammar theory offers a powerful model to account for SLA but its weakest point is that it envisions SLA on purely linguistic terms without taking into account other important factors. The actual learning process takes place together with other aspects related to the nature and the abilities of the learner, his motivations, the degree of similarity between the learner's L1 and the L2, and the kinds of exposure which are available.

Alternative theories such as the **Acculturation/Nativization models** have approached interlanguage development stressing linguistic variability and the constantly changing character of language by extrapolating from analogy with studies on pidginization. The provision of a cognitive dimension on the part of Andersen's nativization model projected an integrative view with the corresponding consolidation of the version of a "transition from an internal to an external norm ". The gap produced by the distance of the interim grammar system (the internal norm) and the target norm (the external one) would involve a whole range of 'variations'. Learners are thus seen to be moving along the continuum between these two extremes. The interlanguage system is subjected to a permanent state of flux, manifested in its unstable,"interim" character, something which reveals an implicit 'dynamic' aspect.

Native use of language presents a specific systematic character. This character of language served as a basis to linguists within the Chomskyan tradition to describe their idealized version of "competence" containing intuitions about "linguistically correct" samples of language (homegenous competence) but not regarding "actual instances of language use" (actual performance). In fact, language behaviour is far from being homogenous (Tarone,1988). Language users

have a variable repertoire which changes depending on different situations and contexts. Variation occurs among speakers due to social factors and within single individuals as a result of contextual changes in the processing of information. The new framework provided the grounds for another crucial conceptual adjustment: a reappraisal of **linguistic competence** in terms of **appropriateness of language use.**

Further contributions from partial theories developed within the **sociolinguistic framework** triggered a reassessment of the code in interactive terms, and a reappraisal of the language user in his interrelations with the language community. The focus of research shifted from 'grammar as shared knowledge residing in the person's mind ' to 'grammar as a characteristic development in a human group ' (Gumperz,1982). The competent speaker needs to know not only the meanings or functions of the various forms available in the system, but also which ones are appropriate to use in which situations within a given community.

The second language learner, in his interaction with speakers of the target language, gets involved in the creative task of shaping up a 'successively-more-appropriate' interlanguage. Through his attempts to communicate, the learner tests the adequacy of his interlanguage stage for achieving 'communicative intent'. Depending on "rejection" or "acceptance" of the exchanges, the reaction of the interlocutor or interlocutors serves as indicator or 'environmental feedback' for upgrading interlanguage. This learning situation is explained by Andersen's 'accomodation and assimilation' theory to account for alternative stages of development (Andersen,1983).

Whether feedback from the environment constitutes an essential feature for second language development is one of the issues open to question. A crucial part of interlanguage development is quite possibly related to the data to which the learner is exposed. Chomsky's initial radical position of conceding very little

importance to parental feedback in language development , derived from the belief that the impoverished nature of the input children received when acquiring their first language, made it improbable that such inadequate input would help in any way for the successful internalization of the L1 rule system. The argument as such was questioned by research developed in the late seventies claiming that language input to children is far more "systematic" than previously believed. Descriptions of language used in communicating with young children (or interlocutors with diminished verbal ability such as 'foreign language learners') referred to as "motherese" or "caretaker speech" suggest that adults typically use 'simple,complete and grammatical sentences' that could provide a simplified model of the target language more in accordance to the interlocutor's current level (Snow and Ferguson,1977; Newport and Gleitman,1977; Furrow (1979). The simplified modification of register was hypothesized to accomplish the expression of affection, on the one hand, and the promotion of communication on the other. The major consequence was a special boost to acquisition.

The basic presupposition in the hypothesis of researchers of both first and second language acquisition had been that learners (whether the child acquiring the L1 or the learner acquiring L2) proceeded in a modular fashion starting from the structural levels, reaching the combinatory rules for syntax and from this repertoire of structures, through some yet unknown paths, progress would be made into the fabric of conversation. Hatch advanced an alternative account for the route towards discourse acquisition. Under the influence of Scollon's proposal (1976) on the contribution of vertical constructions to aid production in L1, and on the basis of studies of acquisition of L1 and L2, Hatch proposes that language acquisition may well function in a reverse fashion: "One learns how to do conversation, one learns how to interact verbally, and out of this interaction syntactic structures are developed."(Hatch 1978) She had made the observation that focus on research in the 1970's had been on form while very limited work had been done on function :

"it is not enough to look at input and to look at frequency; the important thing is to look at the corpus as a whole and examine the interactions that take place within conversations to see how that interaction, itself determines the frequency of forms and how it shows language functions evolving." (Hatch, 1978 :404)

Among the influential figures arguing for *the role of modified interactional input* as the necessary and sufficient condition for SLA is Michael Long. In a classic article (Long,1981) he discusses previous research on speech modification present in adult native speakers when addressing non-natives. Two related phenomena are signalled around this situation: (a) **input** to the NNS, and (b) **interaction** with NNS The first refers to the linguistic forms and the second one is related to the functions those linguistic forms serve as supportive elements for a succesful negotiation of meaning. Long reports that certain patterns have emerged in the findings of previous studies on the subject (Ferguson,1975; Valdman,1976; Fillmore,1976; Freed,1978; Arthur et al. 1980) which can be characterized as **simplified** and often **ungrammatical speech** addressed to NNS. There has been considerable **variability** too, in this line of research, since individual differences evidence that not all studies have found the kinds of simplification that result in ungrammaticality. Such is the case with Wong-Fillmore's (1979) young children subjects interacting with NNS age peers in school and with Freed's (1980) NS subjects who did not present a single ungrammatical utterance when exchanging with NNS partners in a foreign student conversation club in Philadelphia. When analysing the kind of utterances NS used with NNS, Freed found similar properties to those of motherese speech, the forms were shorter and less complex syntactically with a higher proportion of questions. At the same time the utterances became longer and more complex propositionally when addressed to linguistically more proficient NNS. Chaudron (1979) and Trager(1978) on separate studies related to the teacher-talk used with students in the ESL classroom report considerable variability at the level of individual teachers.

Steyaert(1977) in a study comparing the speech used by ESL teachers to native

and non-native speakers of English while retelling stories found no statistically significant differences in syntactic complexity. Such findings differ from a study by Gaies (1977) analysing the linguistic and communication strategies in teachers' classroom language. An extremely important observation to counterbalance the possible effect on diverging results in these two studies is the fact that Steyaert's teachers, unlike those in the Gaies's report , received no verbal feedback from the non-native listeners. One of the shortcomings of the Steyaert study seems to be ignoring the effect of the absence of the interlocutor's feedback, an essential ingredient for collaborative discourse to take place.

Despite some of the inconsistencies in the findings concerning the grammaticality of linguistic input, ungrammatical FT (foreign talk) was more likely to appear under the following conditions:

1) Awareness of very limited NNS's command of language of communication.
2) NS's self evaluation as of higher social status than the NNS.
3) Considerable FT experience in the NS.
4) Spontaneous conversation.

By analogy with 'motherese situations' the behaviour of NS adults interacting with the NNS revealed a variety of 'strategic devices'. These could be judged to have the following general purposes: a) to facilitate comprehension and participation of the interlocutor, and b) to help ensure the NS that he had understood the NNS intervention. Within the first objective there is one type of procedure to help sustain conversation and to lighten the NNS's interactional burden, which operates by supplying utterances which are assembled with those of the NNS to communicate an idea "across" utterances. Such process operates in a

similar fashion to what Scollon (1976) termed 'vertical constructions' taken to constitute a "collaborative structure" across the exchanges with the help of the interlocutor. In the case reported by Scollon the strategy was used by the learner.

Another resource frequently used by the NS is a significantly higher proportion of questions as a signalling device for the NNS to recognise a conversational turn. To avoid conversational trouble and apparently problematic lexical items, the NS resorts to clarification, expansion, repetition and lexical substitution.

Long's particular study was aimed at evaluating the consistency of some of the previously reported findings. For that reason he looked at various features of Input and Interaction through dyads of NS-NS and NS-NNS performing the same six tasks in the same order. From the findings there seems to be better evidence for modifications in features of NS-NNS interaction than input, and for interaction features to be more sensitive to the communicative demands of a conversation. In spite of the close interrelationship between input and interaction it is clearly possible, according to Long, to modify one without modifying the other.

POSSIBLE RELATIONS BETWEEN MODIFIED INPUT, MODIFIED INTERACTION AND SECOND LANGUAGE ACQUSITION

Input*	Interaction*	SLA Possible@	SLS Facilitated@
-	-	P1 (F)	P2 (F)
+	-	P3 (F)	P4 (F)
-	-	P5 (T)	P6 (T)
+	+	P7 (T)	P8 (T)

* Minus signs mean unmodified. Plus signs mean modified.
@ Letters in parentheses indicate projected status.
(T) (F) 'True' or 'False' of proposition.

After considering whether modified input, modified interaction or a combination is necessary for or facilitates SLA in a natural or classroom setting there are eight logical possibilities which appear in the following table as representative of Long's analysis.

Long's conclusions suggest that while input to NNS unquestionably is modified on occasion in various ways, it is modifications in interaction that are observed more consistently. And although the evidence to justify rejection of modified input as a necessary facilitative condition is insufficient, "there is no evidence for its supposed role that cannot be explained more parsimoniously by modifications in interaction."

Important Developments in the Eighties

Input studies have not always been concerned with comprehensibility. Applied linguists (Hatch, 1983; Long,1983; Faerch and Kasper, 1986) distinguish between two basically different types of empirical input studies: correlation studies and modification studies. The first type of studies, as analyzed in chapter one, derived from Selinker's original IL methododology (Selinker, 1972) which basically assessed the frequency of certain linguistic forms (such as "grammatical morphemes") in native speaker's performance compared with their emergence in learners' IL performance. The basis of such comparison served to assess what has been taken into the system and used again for productive purposes. The problem with these early correlation studies was that the items researched were counted disregarding their function and the context in which they appeared. The second type of studies focused either on modification of linguistic features in input addressed to learners, without considering the learner's role in the elicitation of such modifications ("modified input") and studies focusing on modification in interactional structure ("modified" interaction).

The first group of modification studies focuses on the simplifications of native speakers´ utterances to facilitate their comprehension by non-native speakers. Some of the typical features of these adapted simplified versions are :reduced speed rate, use of common words, avoidance of idiomatic expressions, syntactically simplified forms (few embeddings, unmarked word-order, shorter

utterances). The second group of modification studies represent an empirical shift, attempting to research the value of interactional structure in helping "comprehensible input" become a reality, through the learner's and interlocutor's negotiations.

Various **discourse features** identified in both educational (Pica and Doughty (1985) and non-educational settings (Gass and Varonis 1985), include features such as **uptake** and **repair,** (repetitions, comprehension and confirmation checks, reformulation) focused topic nomination and scaffolding.

Long (1981) claims that comprehensibility is better ensured through modified interaction than through input which is only simplified. Scarcella and Higa (1981) reinforce this claim by stating that **optimal input** is the one which results from the most elaborate negotiation work, such as the one which goes on when there are "communication breakdowns".

Aston (1986) counterargues that the underlying assumption in these studies, that "the more negotiation takes place the merrier", is totally unwarranted from an acquisitional point of view. Rather, it may serve the purpose of maintaining the

conversation or ensuring a “formal” rather than a "substantive" understanding allowing interlocutors to perform a ritual of agreement.

The merit of both modified input and modified interaction studies is the information they provide about **linguistic and discoursal aspects of non-native communication,** and in pointing out areas which may have a **learning potential.** Yet it seems a long way from here to predict what was taken into and retained by the learner's IL system. As Chaudron (1985) argues, such predictions will have to take into account the learner's processing of incoming information; in other words, it is requisite for models of L2 learning to comprise a comprehension dimension,

which presupposes some understanding of the processes involved in (L2) comprehension." (Faerch and Kasper , 1986b)

From Comprehension to Language Production

Perhaps one of the key questions posed by the role of input/interaction is the extent to which these affect the route of SLA. In the examinations of native speaker-learner discourse by Hatch (1978) and Long (1981) some interesting hypothesis have been advanced. The most radical position related to the role of **input** in SLA comes from Krashen's 'Input Hypothesis'. Quite popular during the early eighties, although also sharply criticized, (Gregg,1984 ; Faerch and Kasper,1986b; Sharwood-Smith,1986; McLaughlin ,1987) Krashen postulates that:

> "humans acquire language in only one way - by understanding messages or by receiving 'comprehensible input'...We move from 'i', our current level, to 'i+1' the next level along the natural order, by understanding input containing 'i+1'." (Krashen,1985:2)

Krashen does not define 'comprehensible input' ; what he says is that that input is comprehensible when it is meaningful to and understood by the hearer. Presumably, then, it is not mere exposure that is effective, but exposure to the right kind of input.

The role of input is so crucial for Krashen that he considers it sufficient , when understood, to provide the necessary grammar, automatically.. The case of Wes referred in Chapter One would seem to disprove this claim. Comprehensible input cannot, in and by itself , be the only source for providing the learner with the necessary elements to set up his grammatical system. McLaughlin (1987) sustains that 'there is considerable evidence from research that first- and second-language learners acquire structures that are neither understood nor due to be acquired next'.

Some child second language-learners make considerable use of formulaic expressions during their acquisition process. The child does not understand these expressions which function as unanalysed units, but they are stored in the child's memory and strategically used in 'appropppriate situations' without necessarily knowing the meaning of the whole expression fully. (Wong-Fillmore,1976 ; McLaughlin,1984)

The important problem here is the question when **input** becomes comprehensible and when it does not. Understanding messages is one thing but producing them is another. Within the context of the interactional studies we might consider that one way of making input comprehensible for the NNS is by the use of structures and vocabulary which the learner already knows. This type of input, though, has the limitation of not adding anything new to the learner's interlanguage. An alternative way is the "here-and-now" technique, which operates on the basis of directing the learner's cognitive perception towards the immediate environment via linguistic or extralinguistic cues on the basis of world knowledge. (This was apparently a very common resource in the motherese situations, and also frequent in some language classrooms). But probably the most successful candidate would be Long's modification of the interactional structure through conversation. Ellis (1985) believes that the "here-and-now" orientation, together with interactional adjustments, are the main source of comprehensible input.

An extremely important consideration made in relation to the exclusive concern on **input** comes from Swain (1983) who argues that the input hypothesis fails to take into account the role of **comprehensible output**. Krashen's position, in the sense of overshadowing **production** in favor of **comprehension,** leaves out of consideration situations in which learning might be fostered by communication breakdowns where the learner is pushed towards strategic alternative means to get the meaning across. The activity of *producing the target language* helps

learners in several ways, but the most important one being, that it promotes awareness of the existing gaps in their interlanguage concerning what they *want* to say and what they *can* actually say. Although this awareness of the learner may only be partial , it may trigger cognitive processes which might generate new knowledge for the learner to help him consolidate another route for progress , as shall be seen from the following section.

THE OUTPUT HYPOTHESIS

It seems unquestionable that output is a sign that second language acquisition is happening. But what is the real role played by output in the language learning process? One of the functions of production seems to be the provision of adequate practice in the target language. Practicing "enhances fluency" but it also provides the learner with the opportunity to "pay attention" to his linguistic production. This **first function of output**, is according to Swain, the *"noticing"* function. Producing language will give learners occasions to assess the gap between what they want to say and what they can say", leading them to recognize "what they do not know, or know only partially" (Swain ,1995 :129). This consciousness-raising activity will attract the learners' attention to discover their actual communication problems. Such a practical appraisal could trigger some cognitive processing leading to changes in the learners´ linguistic knowledge.

Language production would also possibly lead to **the second function of output**, which is *hypothesis testing* about comprehensibility or linguistic well-formedness (Selinker,1972; Corder-1981). This serves as feedback for learners to "modify" or "reprocess" their output. Swain claims that by reflecting upon their own target language use, learners are able to control and internalize linguistic knowledge. This *reflective role* of output, labelled as metalinguistic, would be **the third function of output.**

We now review some of the evidence relevant to the output hypothesis.

Returning to the first function of output, noticing, Schmidt,R.W. and Frota,S.N. (1986) have previously referred to this noticing principle claiming that "a second language learner will begin to acquire the target-like form if and only if it is present in comprehended input and "noticed" in the normal sense of the word, that is consciously" (1986:311). Research on communication strategies (Tarone 1977;Faerch and Kasper 1983; Bialystok 1990; Kellerman 1991) support this view that learners when faced with communication problems do notice problem areas and try to do something about them. Swain reports on some analyses of think-aloud protocols (1994) in which 40% of language related episodes are related to attention to grammatical form together with the identification of other processes involved in second language learning. Some of these typical cognitive processes, which have already been reported in the SLA literature research, are: extending first language knowledge to second language contexts; extending second language knowledge to new target language contexts and formulating and testing hypotheses about linguistic forms and functions (Selinker,1972; Corder 1981;Kellerman and Sharwood-Smith,1986; McLaughlin 1987).

The second function of output refers to hypothesis testing. The assumption here is that output reveals the hypotheses held by learners about the target language. Learner's output in this way provides the learners with an opportunity to test their hypotheses. Pica et al. (1989) report findings of modified output after conversational interactions. Over one-third of the learners' utterances presented either semantic or morphosyntactic modifications in response to clarification and confirmation requests. It is most probable that feedback from conversational interactions will not always generate modified output, but this situation probably results from the circumstance that learners test only some things at a time through their output due to attentional limitations.

There is no conclusive evidence from SLA research that modified or reprocessed utterances will survive as part of the learner's interlanguage. But the

claim in Swain's case would be that *the process of modification as such would contribute to the acquisition process, representing "a leading-edge of a learner's interlanguage"* (Swain ,1995).

The third function of output would be the metalinguistic, that is the conscious reflective role about language, although in this particular case it is using language which provides the opportunity to reflect about language. This is a special characteristic of the type of negotiation which goes on with second language users. Normally negotiations are about contextual meanings, facts related to the world outside, but in this case the content of that negotiation is also form. The focus is not only on the message but also on the code. There is also a negotiation taking place concerning the formal features which build up meaning. Vygotsky, (1986) on discussing the dialogical principle argues that individual knowledge is "socially and dialogically derived". This occurrence can be observed directly in the interactions of speakers during certain collaborative tasks such as problem-solving.

The major point made by Swain in her proposal of the three putative functions of output is that output has a role beyond the enhancement of fluency. That role is the potential of promoting accuracy. The issue, interestingly enough emphasizes the emerging trend of "focus on form" as a most probably necessary condition for second language learning, usually not provided by the communicatively-oriented input approach.

REMAINING CHALLENGES FOR SLA RESEARCH: THEORETICAL MODELS FROM THE NINETIES

Two imperative questions can be traced throughout the history of SLA research: one is related to the learner's attempt to learn the system and the other is related to the learner's attempt to use the system. In the first problem, SLA research is set to examine the learner's model from the perspective of the analyst, in the second it is involved in the perspective of the learner as a language user. In the first case we

would need to look at the learner's interlanguage model developed through time up to a given stage which is equivalent to his competence. In the second case we will be directly connected with performance and on-the-line problems which require strategic solutions and fast retrieval of information for communication purposes. The analyst's model is made up of the rules that govern the learner's concept about the way language works. The user's model is made up of the resources which enable the learner to sort out communication problems.

Although the influence of Universal Grammar and the transfer of L1 parameter settings are considered two very important factors in SLA , they do not seem to provide a sufficient basis to account for the way the learner might acquire the totality of the L2 and the ability to use it consistently in real-time communicative situations. The parameter-setting model rests on the assumption that adult L2 learners have access to the same language faculty as L1 learners, while a number of theorists support the view that although L1 acquisition requires a linguistic theory, L2 acquisition also needs a cognitive theory to explain how adult learners deal with more abstract language levels. Other features of SLA development which would also escape the explanatory power of UG, and require a different kind of explanation are: hypothesis-creation in those areas where UG is inaccessible or inapplicable, the effects of different kinds of input, the effect of language processing, the use of learners of formulaic language, and learner strategies (Towell & Hawkins, 1994).

According to Zobl (1992), the way in which internally derived hypotheses are reinforced and turned into usable mechanisms depend critically on two more essential elements: data and information processing mechanisms. Relevant data for the acquisition process come in a variety of forms. The importance of explicit instruction with negative feedback is one and exposure to formulaic language in context is another. Both of these kinds of data, however, are made available to learners in a manner different from the internally derived hypotheses. They are a

result of information processing mechanisms which condition the way in which input provides data for hypotheses, the way in which hypotheses must be turned into productions for fluent use and the final output of productions.

Cognitive models attempt to explain L2 acquisition in terms of a general theory of skill learning. Learners are assumed to store information about language as mental representations of 'rules', and these rules guide the learners in using the L2
in performance. These general cognitive skills. are required to construct "knowledge of" the L2 system **(declarative knowledge)** . In addition to acquiring that knowledge , learners also need to develop control over that knowledge and this accounts for the "knowledge how" that L2 system is made operative **(procedural knowledge)**.

To look at this construct, we have to examine those dimensions of the SLA process which fall mainly outside the domain of linguistic theory. For this purpose we would need a model of human information processing involving psychological mechanisms which would account for mental operations related to facts about the world and about language (declarative knowledge), as well as for the mechanisms responsible to make language work by performing the skill (procedural knowledge) We will analyse these problems in further details in Chapter Four.

Variability and performance

It does not seem plausible for variability in SLA to follow as a function of UG constraints on language acquisition. It seems to be the case that variability arises at the point where L2 grammatical knowledge becomes involved with real-time language comprehension and production. This implies that variability correlates with performance factors such as different tasks or tasks differing in complexity.

Widdowson (1989) makes an interesting characterization of these two modes in his distinction between analysability and accessibility. The first is equated with the organised knowledge systems present in the notion of competence while the second is concerned with the operation required to process language in real time - what Bachman (1990) refers to as "strategic competence".

According to Skehan (1995), the fact that learners need to develop underlying language systems, on the one hand, and cope with ongoing and immediate communication, on the other, creates a conflicting competition between a concern for system development and a concern for language use. The resolution of the conflict requires us to clarify how these two models interrelate.

> ..."if we take Widdowson's concepts of analysability and accessibility and relate them to analyst's and user's models of language, there are significant impliations for how competence and performance may rely on parallel processes. What seems to be the default is that accessibility has greater priority, but given that such a system, not inherently focusing on rules, may hit problems, it is possible to 'shift down' to a more rule-governed mode of processing, closer to the analyst's model as the need arises".

Skehan (1995) pinpoints the problem which SLA researchers have to tackle.

> "From a processing perspective we need to consider how language is represented , and how it is accessed and deployed. Clearly, these processes are likely to have some connection with an analyst's model, but the fit is unlikely to be exact, since there is no requirement for the user to observe the rules, however parsimonious and elegant, but simply operate a system which is functional."

AN EXPLANATION OF SLA IN TERMS OF GENERAL SKILL LEARNING

More recent SLA research suggests that we now need to combine the mechanisms by means of which the internal hypotheses are developed with an additional set of information processing components which allow us to indicate the role of external input and output. These components are based on information processsing factors related to the way memory works and the way knowledge is

stored for different purposes.

According to modern SLA research theory, L2 acquisition seems to depend in significant ways on a cognitive framework for information processing. A cognitive theory of language processing considers linguistic knowledge as similar to other kinds of knowledge. This implies that the strategies involved in learning and development are the same strategies used for other kinds of learning. If language acquisition is broadly cognitive in nature, any theory accounting for it would need cognitive elements.

Any complete account of human cognition must include an analysis of the plans or strategies people use for thinking, remembering, and understanding and producing language. For McLaughlin (1990) these strategies are volitional, that means they could be adopted or not, at the language user's discretion. People, however, do not always exert control over the strategies which are called into action nor can they accurately describe them in detail. When engaged in conversation, speakers use strategies for understanding and producing sentences, but McLaughlin sustains that these processes are unconscious and automatic. Human beings learn to use the clutch of a car or master game skills after periods of controlled attention and practice. After many years and with practice, these skills become automatic. Within the framework of cognitive psychology, complex cognitive skills are learned and routinized through the initial use of controlled processes. These are "the stepping stones" for automatic processing. In this respect Levelt (1977) characterizes a conversation as a hierarchical task structure, whose first goal is to express a particular intention. To do this, the speaker must decide on a topic and select a certain syntactic schema. In turn the realization of this schema requires sub activities, such as formulating a series of phrases to express different aspects of the intention. But to utter the phrases there is the need for lexical retrieval, the activation of articulatory patterns, utilization of appropriate syntactic rules,etc. Each of these component skills needs to be executed before

the higher-order goal can be realized, although there may be some parallel processing in real time. In this conceptualization of practice, the development of any complex cognitive skill is thought to require building up of a set of well-learned, automatic procedures so that controlled processes are freed for new learning.

McLaughlin provides us with an information processing perspective, where *restructuring* can be seen as a process in which the components of a task are coordinated, integrated, or reorganized, into new units, thereby allowing the procedure involving old components to be replaced by a more efficient procedure involving new components (Cheng 1985). To study restructuring is to focus on the mechanisms of transition that are called into play as the learner modifies internalized, cognitive representations. Several examples of discontinuous change in the linguistic development of the child illustrate this process.

One developmental shift that has received considerable attention is the transition from exemplar-based representations to more ruled-based representations like the case of past tense learning in English. Another example of this transition is the change from formulaic speech to rule analysis. This process has been discussed in detail by Karmiloff-Smith (1986,1991)) who has repeatedly stressed the importance of the way in which child learners derive hypotheses from authentic naturalistic speech. Her arguments may also apply to L2 learning up to a ceratin extent. Key issues are levels of mental representation, the phases operating within levels and the motivation for restructuring.

The progresion from an exemplar-based to a rule-based representation cannot be easily equated with the conversion of explicit into implicit knowledge or the other way round. A better alternative is to consider this as a separate issue involving the way implicit knowledge changes qualitatively over time.

According to McLaughlin (1990), as learners change their hypotheses, they **restructure** their view about the way language functions. Restructuring takes time

and early hypotheses are slow to disappear. Yet learners seem to progress into more elaborate hypotheses where target language forms are used "correctly". This process seems to be triggered by several conditions and this process of noticing the "grammatical system" is fundamentally learner-centered.

Through the processes of noticing (highlighted here by Swain) and re-structuring, (hypothesized by McLaughlin), learners can build up quite a reasonable knowledge about grammar. But the steps towards development will probably become steadier at the point where the learner's grammatical knowledge becomes involved in language use (Towell & Hawkins, 1994). The purpose of all this knowledge is to enable the learner to construct meaningful and accurate language for communication.

In the framework of these studies we may conclude that the language learner has to cope with three important challenges in his learning process :

a) he needs to use data from multiple sources of knowledge to construct and revise hypotheses about the L2 system : b) he must turn the knowledge the L2 into procedures which will allow him the processing of language in real time comprehenson and production : and c) he has to communicate adequately with other users of the L2 despite his limitations concerning the L2 system. For the less skilled language learner this represents a complex of skills. It could be generalized that learners have to cope with these challenges by means of alternative knowledge sources that belong to a more general learning capability to permit language use. The study of some of such compensatory mechanisms is the purpose of the following two chapters.

CHAPTER THREE

RESEARCH INTO COMMUNICATION STRATEGIES

Communication strategies are compensatory ways to overcome "here and now" difficulties which usually occur due to a breakdown in the communication process. This situation is typical of everyday exchanges and it may affect native speakers or language learners alike (Bongaerts and Poulisse,1989). In both cases the problem occurs as a result of shortcomings of either linguistic or pragmatic origin encountered in interactive performance. The source of the problem might be due to lexical limitations, lack of the pertinent rules of syntax to encode meanings, or inappropriate pragmatic formulas to provide messages. Speakers try alternative ways to bridge these communication gaps. These efforts imply various activities which are directly related to strategic behaviour and procedural skills. Such phenomena have been extensively documented in several SLA studies as occurring when foreign and second-language learners try to communicate in the target language.

The term 'strategies of communication' was invoked as such for the first time in SLA by Larry Selinker (1972) among the five central processes postulated to be operating within the learner's interlanguage system. But pioneer work in this field is associated with Tamas Varadi's (1973) experimental study with Hungarian adult learners of English on 'message adjustment'. He tried to establish a model of interlanguage production focused on the strategies that the learner employed "when he experienced a hiatus in his IL repertoire". Varadi's concern, at a time when Error Analysis was in full swing, was not so concerned with the deviant

character of the utterances a learner produced but rather with the question of how close the learner came to communicating what he wanted.

From the analysis of some of the most characteristic experimental work done on CS, we can see some variation in the approaches. Early research (Varadi, 1973;Tarone,1977;) consisted of a comparison of learners' performance on story telling tasks in their first and second languages. Such comparisons were motivated by the underlying assumption that L2 communication strategies could only be pinned down by reference to available base-line data from the learners' L1. Similar to this approach is the comparison of performance of a group of native speakers with that of L2 learners on an identical task (Ellis,1984). Another variation using story-telling as the main task is Dechert's and Raupach's (1983) concern about temporal variables in speech and the psycholinguistics of second language speech production of advanced speakers of English and German.

Other researchers like Haastrup and Phillipson (1983) prefer the more naturalistic approach and consider NS-NNS 'conversations' as the most adequate data gathering procedure. The problem posited with this kind of procedure is that the 'confrontation' makes the non-natives act in a much more inhibited manner than in more informal interaction. As a result the native speaker ends up monopolizing the direction of the conversation. The data appears to be more realistic but is extremely difficult to handle and not very amenable for either comparative or quantitative research.

A different exploratory line in CS research has been directed towards highly structured tasks such as the instruction to produce something, as in Wagner's (1983) experiment with subjects communicating through directives and clarifying exchanges to build a house from Lego blocks. This type of task is extremely restricted and the purpose of the researcher was to test empirically the concrete manifestation of strategic improvisation on the basis of Faerch and Kasper's parameters of goal, planning, and execution.

Alternative research in CS has focused on specific lexical items. One way of achieving this is by instructing subjects to look carefully at a picture and then to describe it in detail in the target language so that a native speaker can reconstruct it on a large flannel board from a set of random cut-out objects representing elements of the description (Bialystok,1983). Another procedure is to instruct a speaker to describe a limited set of objects (such as a Christmas tree stand, or a tablet arm-chair) to a listener who must discriminate from a set of still photos, the one that fits the description (Tarone,1986). An interesting variation within this approach is Paribakht's (1985) exercise on word transmission involving 'concrete vs. abstract' concepts. An important observation derived from these studies is that learners seem to build a series of redundant structures as a means of making sure that the message gets across. This phenomenon seems to be motivated by an attitudinal factor, a 'general lack of confidence in one's communicative competence'.

The first operational framework attempting to provide a working definition for communication strategies comes from Tarone, Cohen and Dumas (1976) who refer to the process in terms of "a systematic attempt by the learner to express or decode meaning in the target language, in situations where the appropriate systematic target language rules have not been formed." They arrived at such definition after identifying several distinct types of CS occurring among samples of patterns involving phonological, morphological, syntactical and lexical "gaps". The problem with this framework is that the perspective adopted is still constrained by the analyst's viewpoint of learners' “errors”. The resulting taxonomy is quite primitive in the sense that the classificatory criteria is norm-referenced and the proposed strategies are not related to the learner's point of view regarding his choices.

A contrasting typology to that of Tarone, Cohen and Dumas(1976) was soon published by Tarone (1977). Her radical change in perspective was probably motivated by Thomas Varadi's (1973) classic paper on message adjustment. Varadi's main focus was on the learner's awareness of his deliberate sacrifice of

the still "uncontrolled" target forms in favor of "alternative made-up ways to facilitate fluency". His concept is geared towards a learner-centred approach, which highlights the evaluation of the individual language user's varying degrees of approximation to achieve success. The learner's attempts to communicate range from the invention of forms "without any misgivings" to the reduction or substitution of the intended message for the sake of 'correctness'. Part of this spirit is captured by Tarone's new taxonomy (1977) as illustrated below :

.(1) Avoidance (a) Topic Avoidance (b) Message Abandonment
(2) Paraphrase (a) Approximation (b) Word coinage (c) Circumlocution
(3) Conscious Transfer (a) Literal translation (b) Language Switch
(4) Appeal for Assistance
(5) Mime

If we compare this version with the earlier Tarone et al.(1976) we will see that the categorization criteria have changed in interesting ways. The perspective for labelling the five categories can be linked to the types of decisions made by the strategic user in relation to how the communication problem is solved. This is somehow evidenced in Tarone's new proposal based on the learner's strategic attempts.

One of the characteristic changes of the new format is that *paraphrase, appeal to assistance* and *language switch* have been removed from among the six previously listed types of 'avoidance'. It seems that 'attempt' has a positive 'decision-making' feature as opposed to 'avoid' which has the implication of 'abandonment'. This concept of 'abandoning' an attempt becomes "positive" in the context of 'facilitating a way out' for the sake of continuity in communication through alternative pathways. Topic avoidance and message abandonment seem more clearly to be within that range of attitudes implicit in "not trying hard enough" or simply 'giving up'. But as long as they occur as an effort to bridge a communication gap, they will probably have to be considered as a 'strategic' choice representative of the learner's behaviour. A strategy like 'paraphrase' on the other hand, seems to have been definitely misplaced under 'avoidance'. Tarone's own definition of *paraphrase* in terms of rewording the message in situations where the appropriate form is not yet available, does not comply with the attitude of 'abandoning' communication. On the contrary the learner has taken very positive action in the sense of conveying the meaning by simpler resources available to him from within the same target language.

The three subcategories proposed under **paraphrasing**: 'approximation', 'word coinage', and 'circumlocution' all share a creative aspect of language communication which deeply contrasts with the idea of 'avoidance'.

In *'approximation'* the choice is for a single vocabulary item sharing enough semantic features with the specific absent term (as when using 'pipe' for 'waterpipe', or 'car' for 'minibus'); in *'word coinage'* a new term is made up by the learner from his lexical resources in the target language and the expected collaborative imagination of his interlocutor (i.e 'airball' for 'balloon'); in *'circumlocution'* the choice goes along with certain characteristic features of an object or activity (similar to dictionary descriptions) to make the reference highly indicative of what the learner might be talking about.(i.e. he...put some water in kettle and...heat it...on cooker).

Other researchers, such as Blum-Kulka and Levenston (1978), claim that since lexical simplification is a feature of so many diverse linguistic activities it seems reasonable to assume that it operates according to universal principles. Such universals derive from certain aspects of 'semantic competence', namely : a) the awareness of hyponymy, antonymy, converseness and possibly other systemic relations among lexical items which allow for interchangeablity and substitutability within certain contexts; b) the ability to avoid the use of certain specific lexical items by means of circumlocution and paraphrase; and c) the ability to recognize degrees of paraphrase equivalence. These aspects of semantic competence are at the basis of the communicative strategies used by native speakers and most probably second and foreign language learners, when the need arises.

Conscious transfer, the third proposed communication strategy type is derived from cross-linguistic influence. Learners may resort to two alternative strategies of this kind: they literally translate expressions from their L1 or they use the L1 version of the expression they lack, interspersed with words of the target language. **Appeal for assistance** was also removed from the 'avoidance' category of the 1976 taxonomy and relocated in this revised version as another verbal effort on the part of the learner to find a way out from any partially frustrated communicative intent. The final strategy included by Tarone is paralinguistic in nature and also depends on the creative abilities of the strategic user to convey concepts or meanings via mimicry. Many of these have been institutionalized cross-linguistically, as in the case of clapping, but others have to depend on the interlocutor's ability for interpretation.

Bialystok's Typology

Bialystok (1983) conceptually reorganizes Tarone's taxonomy of strategies depending on the source of information on which the strategy is based. For such purpose she proposes three basic sets of strategies:(1) *L1-based strategies* ,

which include those attempts in which the information incorporated into the strategic effort may be basically derived from the learner's source language or any other language other than the target language; (2) *L2-based strategies* which are brought about from alternative resources within the same target language; and (3) *paralinguistic strategies*, in which the source of information is non-linguistic (gestural,mime) or contextually given with the situation.

If we basically reaccommodate Tarone's 1977 typology plus a few other strategy types suggested by Bialystok (1983) this alternative framework would have: **three types of L1-based strategies**, namely, a) language switch, b) transliteration (which is Bialystok's personal 'word coinage' for 'literal translation') and c) foreignizing , which is a variation within literal translation, by creating non-existent or contextually inappropriate target language words through the application of L2 morphology and/or phonology to L1 lexical items (i.e.'appresuration' from the Spanish 'apresurarse' to mean 'hastily') ; **three types of L2-based strategies**: a) ***semantic contiguity*** , a very similar strategy to Tarone's approximation; b) ***description***, which renders three types depending on the kind of information incorporated into the description: 1) with general physical properties such as colour ,size ,material, spatial dimensions etc. 2) with specific distinguishing features, (such as ..'it floats on air under... to distinguish an hovercraft from a boat). 3) interactional/ functional characteristics which are aimed at indicating the functions of an object and the actions that can be performed with it. (All these forms of description would correspond to 'circumlocution') and c) ***word coinage***; followed by paralinguistic strategies, such as mime.

BIALYSTOK'S TYPOLOGY

L1-Based Strategies:	**a) language switch** **b) transliteration** **c) foreignizing**
L2-Based Strategies:	**a) semantic contiguity** **b) description**

	(1) with general physical properties (2) with specific features (3) interactional/functional characteristics. c) word coinage
Paralinguistic Strategies:	mime

Faerch and Kasper's Typology

Tarone's basic orientation in her new taxonomy was the learner's perspective. Bialystok's framework is along similar lines because it emphasizes the source of information that the learner has drawn upon to solve the communication problem. An alternative organizational principle, although still learner-centered, is the one proposed by Faerch and Kasper (1983). Faerch and Kasper's contribution becomes specifically valuable because they try to adopt a perspective to locate communication strategies within a general model of speech production. The model comprises two phases: a **planning phase**, including 'goal', 'planning process' and 'plan', and an **execution phase**, with a 'plan', an 'execution process' and an 'action'. The aim of the planning phase is to develop a plan, involving the next phase, which is the executive, as the starting point leading to action. This contrasts with other perspectives such as Miller's, et al (1960) which distinguish between 'ready-made', automatic plans which the individual can choose from and plans which are built up 'in situ'. Faerch and Kasper do not foresee any serious consequences for treating communication strategies whichever position is adopted. Nevertheless they adopt the stronger claim as seen from a cognitivist view and 'consider all intellectual processes to be planned by either ready-made, automatic plans or by ad hoc constructed plans.' Goals from a communicative perspective have a hierarchical structure consisting of actional, modal or propositional elements. The *actional element* is related to speech acts, hence to speaker's intentions; the *modal element* is associated with the role relationship

holding between interactants; and the *propositional element* with the content of the communicative event.

The objective of the planning phase is to develop a plan which can control the executive phase. Three variables operate within the planning phase: the communicative goal, the communicative resources available to the language user and the assessment of the communicative situation. The situational assessment is a very important aspect of communication since it serves the individual to build a hypothesis about which parts of linguistic knowledge are shared with the interlocutor. The original plan of learners with limited resources is frequently changed and must go beyond what is considered as 'common shared knowledge' in order to overcome communicative gaps. Once the basic distinction between the planning and the execution phase of speech has been adequately characterized in Faerch and Kasper's model, 'communication strategies' as such seem to belong within the planning phase. The categorization of 'strategies' in the conceptual status of 'a planning process' proceeds from the idea of their 'steering' or 'monitoring' role of the speech execution. It follows logically that they should be somehow conceived as outside the execution process itself.

Faerch and Kasper (1983) argue that the adequacy of defining strategies as a specific category within the model of speech production (such as a subclass of plans) can only be assessed in relation to a specific interest in foreign language learning and teaching (Erkenntnisinteresse). This argument is in agreement with the realization that communication strategies represent a highly significant aspect of IL communication. For this purpose they call for the inclusion of 'strategic competence' within the foreign language teaching objectives as an integral part of communicative competence. Their appeal has gone beyond the FLT frontiers and has actually received some reasonably adequate formalization in Lyle Bachman's framework for describing communicative ability , in which 'strategic competence' is granted an outstanding role next to language competence (branched into organizational competence and pragmatic competence) and psychophysiological

mechanisms (productive and receptive). Bachman's 'strategic competence' is developed within the lines of the assesment-planning- execution proposal.

Faerch and Kasper's (1983) first categorization of communication strategies was based on what they consider as two fundamentally different types of behaviour in language users when they handle problems of communication: **1) avoidance behaviour** and **2) achievement behaviour.** In the first case the learner tries to evade the problem, normally by changing the communicative goal; in the second case the attempt is to tackle the problem directly by developing an alternative plan. These two basic problem-solving approaches lead to the two major strategic types: ***Reduction Strategies***, triggered by avoidance behaviour and ***Achievement Strategies***, triggered by achievement behaviour.

Each type of strategies results in very different types of solutions to problems and the choice of strategy, as will be seen, reveals not only a behavioural pattern but also some 'hunch' on the part of the learner concerning the nature of the problem to overcome, particularly when the problem involved is one of 'fluency' vs. 'correction'.

REDUCTION STRATEGIES	
Formal Reduction Strategies:	**Subtypes** **phonologic** **morphological** **syntactic** **lexical**
Functional Reduction Strategies: **content**	**Subtypes** **actional reduction** **modal reduction** **reduction of propositional** **topic avoidance** **message abandonment** **meaning replacement**

ACHIEVEMENT STRATEGIES	
Compensatory strategies **:**	**Subtypes** **(a) code switching** **(b) interlingual transfer** **(c) inter-/intralingual transfer** **(d) IL-based strategies:** **(i) generalization** **(ii) paraphrase** **(iii) word-coinage** **(iv) restructuring** **(e) cooperative strategies** **(f) non-linguistic strategies**
RETRIEVAL STRATEGIES	

Reduction strategies entail the strategic user's decision to communicate by means of a reduced linguistic system (formal reductions) or via a reduction or evasion of any of the communicative goals (functional reductions). The decision of

adopting reduction strategies on the part of the learner is to avoid making errors and increase fluency. According to Faerch and Kasper (1983) "the difference between formal reduction caused by error-avoidance and formal reduction with a view to facilitating communication " is an attitudinal problem. In the first case, some language learners might feel badly about communicating in a foreign language exhibiting linguistic handicaps, in which case they adopt the correctness approximation attitude via error-avoidance. In the second case the learner is conscious that he is using utterances which deviate from the target norm, but he considers that appropriate for the sake of better communication attempts.

In this context it appears that all areas of the IL system are susceptible to reduction. Nevertheless from Faerch and Kasper's further elaboration of the types of formal reduction we are left with the impression that particular avoidance at the phonological, morphological and syntactic level needs, as a general rule, the subsequent application of compensatory strategies of the achievement type. This would be the result of the realization on the part of the learner that the imposition of morphological, syntactic, or lexical restrictions would require supplementary items to be provided. This is a necessary step to ensure that there is sufficient redundancy for the interlocutor to retrieve meaning from the tailored version at these levels.

The omission or reduction of items as such at the functional level seems more plausible in the sense that learners can reduce their IL performance with regards to politeness markings, or avoid certain situations involving specific speech acts for the sake of limiting their processing load. Such circumstance allows a better control of the core elements during communicative attempts. From the remainder in the list, topic avoidance and message abandonment roughly correspond with Tarone's version. Although a finer distinction is provided through an additional strategy called 'meaning replacement', this new label admittedly results in an arbitrary variation of 'topic avoidance'.

Achievement strategies are the learner's attempts on the risk-taking end to communicate without totally abandoning the IL system resources. Researchers are particularly interested in their prospective pedagogical implementation due to their potential for bridging communication gaps and the good expectations of success they arouse in learners. Faerch and Kasper provide a clearer analysis of this general type which can more clearly be pinned down as occurring at all linguistic levels. There is a further distinction between compensatory strategies, which are aimed at solving problems in the planning phase and retrieval strategies which are aimed at solving difficulties in the executive phase. The taxonomy is

better developed within the first group of strategies while the retrieval strategies receive a very superficial treatment.

Compensatory strategies are also more frequently discussed in most taxonomies . Common compensatory strategies are:

a) **code switching** (Tarone's'language switch'(1977);Corder's 'borrowing' (1978); Blum- Kulka/Levenston (1978), which may involve from single words to complete stretches of discourse.

b) **interlingual transfer** (from any language other than the target)

c) **inter/intralingual transfer,** which implies a generalization of an IL rule on the basis of what the learner considers to be formal similarities between the L2 and his L1.

d) **IL-based strategies** include : **i)** ***generalization*** , which results in extension of an item to an inappropriate context (similar to Tarone's 'approximation');

ii) ***paraphrase***, which takes the forms of descriptions or circumlocution (as Tarone,Bialystok, Levenston and Blum (1977); **iii)** ***word-coinage*** (Varadi,Tarone) and **(iv)** ***restructuring***, which is 'used whenever the learner realizes that he cannot complete a local plan.' (as in the case of a learner who gets around the word 'daughter' by restructuring a previous utterance :'...my parents has I have er four elder sisters..).

Finally, we find e) **cooperative strategies,** which are practically Tarone's version of 'appeal for assistance' and f) Non- linguistic strategies, which capture the paralinguistic level such as mime , gesture or even sound-imitation as the ultimate resort for supporting the other verbal strategies. In a way this strategy is some sort of complementary appeal for assistance to the interlocutor as well.

Since communication strategies are defined in the Faerch and Kasper's model as special plans developed during the planning phase as part of the planning process, Bialystok infers that strategies, then , are a subclass of plans. In a hierarchical appraisal of the proposed framework, strategies would be

incorporated into plans and plans form one of the two essential processes of communication, namely, the planning process.

The fact that strategies are given the defining criteria of 'problem-orientedness' and 'conciousness' makes it implicit that strategies, as plans, would be developed within the context of 'response to a problem through the conscious intervention of the speaker'. These would be supplemental aspects to communication which may be inserted into production when a problem arises. If 'strategies' are conceived outside the execution process in that they "steer, monitor or control speech execution", Bialystok is correct in expressing her doubts about this artificial separation of the putative 'monitoring function for execution' from execution itself. This distinction between the planning and execution phase is perhaps the most difficult aspect of Faerch and Kasper's model to deal with.

Clark and Clark (1977), a source of influence for Faerch and Kasper's theoretical proposals, cautiously admit, that 'the division between planning and execution is not a clear one' with moments where speakers are usually doing a bit of both. (Clark and Clark, 1977 :224). In the Clark & Clark model, the five steps hypothesized as a construct of language production which are: discourse plans, sentence plans, constituent plans, articulatory programme and articulation, present a gradual development from the planning to the executive phase. Bialystok (1990) believes that although the distinction between planning and execution might be a correct one, she finds it difficult to see how this could be operationalized in the 'communication strategies model'. The problem here is "how, then, to distinguish strategies of communication from the process of communicating".

The most positive aspect of the Faerch and Kasper's taxonomy for any researcher is the fact that the framework as such is general enough to contain the whole range of phenomena labelled as communication strategies appearing in most of the other accounts available in the literature. Furthermore they provide some alternative degrees of delicacy in their taxonomy not present in alternative

ones. Most important of all is Faerch and Kasper's attempt to adopt a psycholinguistic approach locating communication strategies within a general model of speech production. This has allowed them to work on a hypothesis for a tentative typology which, despite some logical shortcomings basically derived from the very initial stages of research in the field, includes categories extracted from real phenomena. This has been possible on account of some empirical evidence provided by previous studies, already mentioned here, which basically illustrate either conversational data of individual cases or classroom-interaction data obtained by European researchers. One significant aspect of communication strategy identification is that despite overlapping, fuzzy areas, and some minor disagreement with regard to certain categories and their subcategories, researchers, on the whole, seem to have reached some consensus specifically with regards to the characteristic behaviour that seems to govern most strategy users.

Nevertheless, since typologies can only be generated once the strategies have been categorized, the problem of consensus becomes a complicated issue. This is particularly true when the area of enquiry has been recently established as is the case with communication strategies. Researchers have agreed on the fact that some strategies result from the manipulation of form while others happen through manipulation of meaning. This aspect of consensus is clear across the various classification systems. The problem arises when, although the same terms recur throughout the systems, they are assigned different values in classifications.

As an example let us mention that the term 'reduction' for Bialystok (1990) reflects a popular way to describe 'adjustment made to optimal forms of expressions', but for Faerch and Kasper it serves to label a whole classification set connected with 'avoidance' behaviour, (which in turn constitutes another conflicting term for interpretation). There seems to be a tendency in new fields to spawn new terms and this exercise is sometimes at the expense of duplicating

names and labels which, in the best of cases, are only conducive to confusion. The problem becomes complex when clear and precise defining features are absent, particularly if the phenomenon under study is of elusive nature. There are still some unresolved problems affecting definitional aspects of CS such as 'problematicity', 'consciousness' 'learner's behaviour that triggers strategic choice which will be analysed later in this work.

FURTHER EMPIRICAL RESEARCH

Paribakht

A more restructured taxonomy to account for strategy use in face of lexical problems has been outlined by Paribakht (1985). The two basic hypotheses which Paribakht set out to examine in her study were : (1) whether the type of communication strategy used by speakers will vary according to their target language proficiency level; and (2) whether the relative frequency with which speakers use different types of communication strategies will vary according to their proficiency level. Her taxonomy has the following components:

I **Linguistic approach**, which exploited the linguistic features of the target items.
II **Contextual approach**, which exploited the speakers' contextual knowledge.
III **Conceptual approach**,which exploited the speakers' world knowledge.
IV **Mime**, which exploited the speakers' knowledge of meaningful gestures.

With regards to Hypothesis 1 the analysis revealed that all three groups basically used the same four communicative approaches. Learners used both L1-based strategies and L2-based strategies. However, a comparison of the learners' strategic use showed that the lower-proficiency group used more L1-based

strategies (specifically idiomatic transfer and transliteration of L-1 idioms and proverbs). In contrast, transliteration of target language idioms and proverbs was used only by the native speakers and the advanced learners. The analysis of Hypothesis 2 which involved quantification procedures, was performed on both the separate data of 'concrete vs. abstract' concepts, and the merged data on the two concepts.

Both types of concepts elicited a number of communication strategies specifically related to them. This was evidenced in the cases where **physical description** and **functional description** (both subtypes of 'circumlocution' under the linguistic approach) were exclusively used for communication related to concrete concepts, while **antonymy** (subtype of comparison under the linguistic approach and **metonymy** (under the conceptual approach) were specific to the communication of abstract nouns. Significant differences were seen among the three subject groups in their relative frequency of use of the four proposed general strategies. Results showed that native speakers and advanced learners tend to use the linguistic approach more frequently, while low-proficiency students made use of the conceptual approach relatively more often than the former two groups. A further piece of evidence provided by the study in relation to the four-category CS system was that **mime** appeared to be more frequently adopted by the learner groups than by native speakers.

Following Scholfield's criticism (1987), it would seem that the major shortcoming in Paribakht's study is the lack of communicative focus in the tasks provided for her research. The fact that the putative interactional setting is to communicate the meaning of concepts in a completely decontextualized fashion makes the whole atmosphere a very artificial one. It is understandable that the project as such was aiming at restrictive means to cope with a specific area such as lexis. The intention to cope with lexically-driven strategies might also explain the decision to use a list of words contrasting concrete vs. abstract concepts.

One of the major difficulties in researching communication strategies is delimiting the data to be able to cope with the amount of transcription, especially if the number of subjects amounts to sixty as in this case. But we are still left with a major query : did the means justify the aim? The answer is not clear. If the objective is to examine the use of strategies to communicate concepts then some justification is viable under those parameters. But most research developed up to the late eighties even when it is restricted to lexis has looked for what Scholfield (1987) defines as a 'reasonably realistic simulation of real life'. Thus, the major criticism is of the task itself, as being totally removed from the context of 'message orientation'. So we are left with some sort of 'metalinguistic exercise' with ample provision of clues, as in a 'guessing game', but lacking the naturalness of communicative exchanges. This kind of argumentation would make the exercise appear as questionable and would probably cast some doubts on the validity of results as well. Nevertheless, reality is multi-sided and there are certain aspects of research which we might condemn under a certain prism and frame of mind which can otherwise be redeemed in the light of new discoveries, a different scope and a different point in time. Although Paribakht's tasks lack a real interactional dimension, there are mitigating factors on her side. If learning to use language in specific ways is related to literacy, schooling or even culture, (Bialystok, 1990), the use of definitions in tasks might serve other purposes such as triggering a manifestation of specific rhetorical resources for enhancing the quality of communication. This could imply that communication strategies, by extension, may vary in form with the cognitive and metacognitive sophistication of the speaker and vary in quality with the speaker's oral language proficiency. There is probably that particular interesting dimension behind Paribakht's study in the sense that it establishes connections between resources in the provision of definitions and prospective CS resources for conversational support.

Dechert and Raupach

Most investigators until the late seventies had researched CS phenomena, either in isolation or at the sentence level. The experiments by Dechert and Raupach are an attempt to analyze communication strategies in language learner data at the paragraph as well as the discourse planning level through a corpus of story-telling situations.

One of the major concerns in Dechert and Raupach's research has been to elicit second-language productions under conditions that come close to natural situations but which at the same time create various processing problems. Using Faerch and Kasper's view of communication strategies, both researchers have concentrated on 'hesitation phenomena' such as unfilled pauses, filled pauses, lengthening of syllables, false starts, self-corrections, repetitions ,etc. as particularly instructive markers in the speech of language learners. Such speech markers have proved to be extremely useful in the speech of natives since they serve as signals in the turn-taking system, as well as in the metalingual and phatic communion of speech (Olynik,1987).

Two basic assumptions guide Dechert and Raupach's procedures. The first assumption is that "**narrations are generated from an underlying metalinguistic processing procedure that may be activated in the L1 as well as in the L2**". The accessibility of such a narrative-processing schema underpins key processes for generating language, such as : the activation of the required knowledge sources for adequate planning, organizing the subject's perception of the state of affairs, memorizing a few situations and reconstructing a series of events. The execution phase requires the solution of lower level, as well as higher level, processing problems such as: lexical search, reference communication problems (particularly for setting the scene, and identifying characters), pronominalization and deixis (for cohesion and sequencing of events) amidst potential interference mechanisms derived from linguistic limitations in learners.

The second assumption derives from the belief that **"the production of any language, L1 or L2, is to a large degree based on the 'prefabricated language units' commonly referred to in SLA studies as *formulaic language*."** Native speakers seem to build-up their speech on the basis of retrieval from the in-built storage of these 'ready-made chunks' which provide them with the opportunity to buy time for planning the more careful units of 'controlled speech', normally characterized as 'creative speech' (Clark & Clark, 1977; Yorio,1980; Peters,1983; Pawley and Sider,1983). Dechert (1983) prefers the term 'islands of reliability', borrowed from simulation models in artificial intelligence. The use of such 'islands' is of proven value as initiators of hypothesis-testing procedures on the word-level of processing and above. The process is applicable to language production procedures as well, since to speak a language competently would mean having control over a large repertoire of such islands. The cognitive gain involved in the use of these *formulas* is that once the learners become confident in their use, they manipulate them to improve information processing and production. Another potential advantage is that familiarization with the forms might concentrate learner's attention on their component parts for analysis.

THE NIJMEGEN PROJECT

The most extensive current research on communication strategies is probably the Nijmegen project. This is a large scale study developed by Kellerman *et al* (1986,1987) with focus limited to referential communication in both Dutch and English (the L1 and L2 of the subjects under analysis) while a certain descriptive task was being performed. The task was to describe an abstract shape so that it could be identified from a set by a listener. The central interest in the study is directed towards basic lexically-driven strategies of the achievement type and equivalent to Faerch and Kasper's 'compensatory strategies'.

The importance of this project derives from the attempt to correct what Kellerman *et al.* claim to be the limitations of previous taxonomies, namely: (a) a

tendency to confuse the linguistic realization of the referential strategy with the strategy itself, and (b) a confusion of the strategy with the properties of the referent. This problem has been referred to by Bialystok (1990) as 'the modularity fallacy'. Such a fallacy has the implicit assumption that linguistically distinct utterances constitute separate strategies and it is based on the false belief that 'surface structures are reliably related to speakers' processes or intentions'. This was the 'weakness' of initially proposed typologies (such as Tarone, Cohen and Dumas' , 1976) in the sense that strategies were assigned to classes on the basis of surface structure forms. This specific bias was corrected with Faerch and Kasper's framework, based on a model which places strategic language use within a language processing perspective.

Kellerman *et al.* propose a taxonomy consisting of two basic general strategies: **conceptual** and **linguistic**. The conceptual strategy includes two approaches: the **holistic**, referring to the use of a single word to substitute for the target version. This approach is analogous to Tarone's *approximation*. The second approach is the **analytic**, referring to the more elaborate descriptions attempted to compensate for the target word. This strategy is equivalent to most of the description and *circumlocution* strategies included in other taxomomies. In a later revised version of the conceptual strategy Kellerman maintains that the holistic and analytic approaches do not constitute separate strategies but are rather different possible realizations of the same strategy. Also it is frequently the case that both approaches are combined.

The linguistic strategy entails a communication process which has been carried out through some adjustment of the linguistic label used for the target concept. Code switching, interlingual transfer (foreignizing), transliteration and some instances of word-coinage belong in this category.

According to the Nijmegen researchers, one of the major problems faced when analysing the data is confounding the compensatory strategy used by the

strategic language user with the properties of the referent (Kellerman,1988). Such an error would ascribe each type of description to a different strategy, as has been the case when description of function ('you use it for cutting'), description of shape ('a blade on a handle'), and 'word-coinage' ('a blade handle') are assigned to different categories in most taxonomies. In the previously proposed two-category system, all of these examples belong in the **conceptual category**. The assumption behind such a decision is 'that there is a natural relation between the object itself and the properties, characteristics and purposes of the referent chosen by speakers to refer to that referent'.

Kellerman (1988) hypothesizes that an adequate taxonomy of communication strategies must meet three conditions, namely, parsimony, psychological plausibility and generalisability. Within the criterion of **parsimony**, the smallest number of strategies that account for the data provides the best description. The advantage in this condition would be the possibility to collapse categories enumerated in the larger taxonomies under a more restrictive higher-order description. The second condition of **psychological plausibility** implies that some description of language processing should be directly linked to divisions among strategies. This is related to the possibility for some evidence to be provided to support the claim that these strategies reflect *psychologically-valid* communicative processes. The condition of **generalisability** refers to the fact that the same taxonomy should equally fit data generated through different tasks and using different items.

It appears from Kellerman's proposal that the condition of parsimony is governed by the same principle valid in linguistic description for the sake of "economy". This principle is not only efficient for the purposes of organizing taxonomies which have reached the verge of chaos but also a frame of reference to avoid proliferation of unnecessary subcategorizations. The only problem with a very restrictive system such as the one proposed by the Nijmegen taxonomy,

which operates on the basis of the dichotomy **conceptual vs code strategies**, might be leaving out other aspects or distinctions implicit in the processing of communicative strategic behaviour concerning important areas of analysis such as discourse. If the proposed dichotomy works efficiently when applied to 'referential communication', there seems to be no references related to the use of communication strategies in the context of discourse.

There is an obvious advantage in a two-strategy classification, particularly for statistical purposes, but we might be losing some degree of 'delicacy' and perhaps further research within this proposal is warranted.

AN ASSESSMENT OF CS RESEARCH

The last decade has witnessed a variety of different perspectives about how to characterize CS when produced by learners. However, there seemed to be a relative degree of compatibility within taxonomies coexisting with some disagreement about the actual range covered by learners' communication strategies.

One major shortcoming in research over time was the almost exclusive concentration on lexical problems. This resulted in a lack of insight about CS that learners use to cope with gaps in grammatical knowledge for example. The taxonomies which have been analyzed do not clearly refer to problems at the grammatical level. Very little has been proposed in terms of the developmental nature of CS in the learner's L2 production, this is most probably due to the synchronic character of most studies. Most research on CS at the discourse level (Wolf,1986 ; Olshtain and Blum Kulka, 1985 ; Cohen, A. ,1986) has concentrated on taxonomies of discrete discourse functions (such as, apologizing, thanking, complaining, expressing doubt), but studies interested in analyzing learner performance in coping with discourse structure as such are less common .

Despite the fact that the early works of CS research (Tarone,1977 ; Faerch & Kasper, 1983 ; Dehert, 1983 ; and Poulisse et al. ,1984) restricted the conceptual framework to problem-solving activity , a very interesting aspect of their definitions is that they conceived "communication strategies" as *mental plans* implemented by the learner in response to an internal signal without an engagement of the interlocutor's support to achieve his/her communicative goals. This **intra-individual view,** which is psycholinguistic in nature, conceives CS as part of models of speech production or cognitive organization and processing . But within the same group, there were contrastive views which developed in researchers like Tarone (1983) and considered that CS were also the result of the mutual attempt of two interlocutors to agree on meanings in situations where requisite meaning structures were not shared. At this point , **the inter-individual view,** which is interactional in perspective, introduced a different theoretical orientation.

These two basically distinct approaches, which have developed in recent years, characterize the main concern of current research activity on strategies for communication. One views CS as strategic resources used by learners in the context of interactions; the other deals with CS from the perspective of cognitive processes involved in L2 comprehension and production. The first group, which is more sociolinguistic in orientation, emphasizes the research of variability in linguistic performance while the second group, more psycholinguistically-oriented , concentrates on the generalizability and the psychological plausibility of their categories. Varadi's, Tarone's and the works of several others would fit within the sociolinguistic or interactional model, while Faerch and Kasper's, Dehert's, Bialystok 's and The Nijmegen project's represent the psycholinguistic or cognitive model.

The two approaches also differ in the number of strategies considered necessary to characterize the learners' performance in CS research. In the typical sociolinguistic approach there are both reduction strategies and achievement strategies. The first type is associated with avoiding, changing or abandoning a

communicative goal when problems arise. The second type, also called compensatory strategies, is characterized by the use of alternative communicative resources (approximation, circumlocution, language transfer, word-coinage) in the face of difficulties. The psycholinguistic approach focuses only on compensatory strategies, divided into two types : conceptual and code. Conceptual strategies are either holistic (using a term for a related substitute concept) or analytic (describing properties of the referent), whereas a code strategy involves using purely linguistic resources.

There are also important differences in the research design of both approaches. The sociolinguistic approach compares the learners' L2 performance with baseline data obtained from TL native speakers performing the same tasks. The psycholinguistic group uses learners as their own controls with tasks in L1 performance being compared to similar tasks in L2 performance.

According to Yule and Tarone 's (1997) evaluation of the "then-state of the art", which would roughly correspond to the late seventies and eighties, there existed a variety of different, though relatively compatible perspectives on taxonomies and research methodologies related to CS . Their perception of the present decade is one of a fairly serious challenge to the validity of much of the previous work done on this particular area. This marked divergence of focus is essentially characterized by the two theoretical approaches which have been previously sketched. But one fundamental difference underlies the methodological approaches. While the sociolinguistically-oriented research has emphasized descriptions of the language forms, that is, the actual means used to accomplish communication, the psycholinguistically-oriented research focuses on a description of the psychological processing involved in communicative production. The sociolinguistic approach concentrates on the external and interactive nature of the performance, while the psycholinguistic group focuses on the internal and cognitive processing aspects of communication

Given this dichotomy of approaches, research in commmunication strategies must bear in mind an appropriate framework to conciliate perspectives for a more integrated account of learner's strategic competence in communication.

CHAPTER FOUR

THE LEARNER'S ATTEMPTS TO LEARN THE SYSTEM AND THE LEARNER'S ATTEMPTS TO USE THE SYSTEM

The central point in Chapter One concerning the learners was their continual and active revision of the underlying grammatical systems in their approximation towards native-like competence (Corder,1971 ;Nemser 1971). The learner´s knowledge about the system was characterized as a series of overlapping grammars in which each grammar shared rules with grammars of the previous stages but also contained new or revised rules. Selinker (1972) coined the term "interlanguage" for the learner's knowledge of the system and claimed for this "interlanguage continuum" the status of a system in its own right. But Selinker also postulated five central processes operating within the interlanguage systems as responsible for L2 acquisition. Although Selinker's proposed strategies (with the exception of "transfer") have not been taken up by theorists in SLA research , his pioneering ideas opened an alternative way towards learner-centered research in the area of language processing.

Chapter Two concentrated on the analysis of research concerning the learner's interlanguage. This analysis projected a historical perspective considering contributions made along the route of SLA research according to developments in linguistic theory, cognitive psychology and discourse pragmatics. The most important issues were centered on the evaluation of the role of input for the learner's construction of an interlanguage system and the appraisal of factors such as the role of interactional adjustments as sources for comprehensible input.

Two of the most important questions highlighted by SLA researchers through time are involved with: how language is represented in the learner's mind and how it is accessed and deployed for actual use. The first problem is related to the learner's knowledge of the system and the second problem is concerned with the ability of the learner to activate that kowledge for actual use. This chapter develops specific ideas concerning these two questions and discusses some cognitive proposals put forward by psychological models together with related research issues. Some of those issues are: the transition of implicit to explicit knowledge, the importance of attentional devices to promote learning, aspects of information processing and factors that help promote fluency and accuracy in foreign language learning.

A distinction should be made between theories that explain how the learner constructs mental representations of the rules and items that comprise the L2, and theories that explain how learners employ such knowledge in actual language use. In simpler terms we are concerned here with a distinction between what the learner knows about the language system and what the learner does with that knowledge to put it into communicative use.

IMPLICIT AND EXPLICIT KNOWLEDGE

Developments in interlanguage theory concerned with the role of formal instruction in L2, have brought about two interesting concepts about second language knowledge to SLA research : *implicit* and *explicit knowledge*. (Krashen,1982 ;1985 ; Bialystok & Sharwood-Smith ,1985). In SLA research, explicit knowledge is generally used to refer to knowledge that is available to the learner as *conscious* representation. Learners have access to this knowledge by looking at aspects of the system as an analyst, trying to find explanations about how the system works . Implicit knowledge manifests itself in two forms : as *formulaic knowledge* and as *rule-based knowledge*. The first type consists of "memorized sequences " and "lexicalised sentence stems", also present in native speakers' speech (Pauley and Syder (1983),

which embody social aspects of the knowledge of the community about conversational situations. This sort of language is essential for fluency and in the handling of day-to day situations (Ellis,1994) . These "ready-made formulas" also perform a psycholinguistic function in speech production, and Dechert (1983) suggests, from research on learner's strategies, that they serve as "islands of reliability" which help learners to construct and execute speech production safely and fluently. Rule-based implicit knowledge consists of abstract system rules which are available to the learner either as innate linguistic structures (a claim made by the Universal Grammar hypothesis) or have been internalized by learners via exposure to comprehensible input. Karmiloff-Smith (1986) sees a role for these innate structures alongside "psychologically determined representations" . She argues that it is essential to be able to give an account of development in mental representation , through a process of restructuring. The learner passes from a level of implicit knowledge of the language (knowledge of the meaning of the language in context through unanalysed wholes) to different levels of explicit knowledge. This allows the learner to go from a state of "no awareness" of relationships between language forms to a second stage of 'unconscious ' awareness , and then possibly on to a "conscious awareness". Bialystok (1982, 1990), has put forward very similar ideas to those developed by Karmiloff-Smith but in the context of second language learning. Bialystok argues that L2 learners progress along two relatively independent but interacting axes of development :*analysis* and *control.* 'Analysis' allows learners to build up mental representations of the relationships established between symbols within the language system. In this sense it is concerned with structuring and differentiating knowledge. 'Control' helps learners to access knowledge and select information from those mental representations. This process of selective attention makes it possible for learners to improve their performance in a wider range of contexts. Learners progress along these two processes which seem to parallel the movement from 'implicit' to 'explicit'

knowledge via 'restructuring', as proposed by Karmiloff-Smith. Bialystok

(1990) has explored the demands which tasks make for these two processes. The same model has served Bialystok to propose a macrotaxonomy for communication strategies regarding the manipulation of concepts (analysis-based strategies) or the manipulation of means of expression (control-based strategies).

An earlier version of Bialystok's (1982) two-dimensional system was presented in terms of 'knowledge' and 'control'. These parameters could be equated with "the notions of 'competence' and 'performance'. In that sense the 'knowledge' dimension referred to the learner's knowledge about organization of the language system, while the control dimension concerned the learner's ability to construct transitory ways to make flexible use of his limited resources to maximize performance under real-time demands.

In the current version of Bialystok's model the strength is probably in the "control" end of the system which provides a framework for describing what goes on in the process of planning and participating in speech . The "analysis" part becomes a confusing issue in the sense that we do not know for example, what structures the analysis operates upon, without clarifying the nature of the underlying competence and the circumstances of the change. Another aspect in which the analysis-control model appears to be weak is related to the way the system develops and the sorts of paths which are followed for such development. In general, it seems quite plausible for this sort of model to account for the fact that an existing explicit system can become more explicit to enable its instrumentalisation for language use in the case of first language acquisition. The situation becomes more difficult to account for in the case of second language learning.

CONCIOUSNESS AND AWARENESS

A more challenging approach along the same concepts of explicit and

implicit knowledge but within the framework of second language-learning, is provided by Sharwood -Smith (1986). For him it seems that the language system that the learner builds upon the basis of exposure, leads to a different kind of knowledge structure throughout the transitional stages, but not necessarily to the native speaker's norm. It is precisely for this reason that the description of learner language, particularly in its early stages should be done in its own right and without particular references to the target language.

This analysis leads to two key questions : If some learners function in a most

rudimentary sense than others, how does the learner operate to deploy his limited resources at the beginning? and how does he progress from one stage to another?

According to Sharwood-Smith (1993), input may or may not be registered and "an explanation of input is meaningless without a theory of what the registration process involves". Two basic possibilities are considered here for processing input: processing input for meaning and processing input for acquisition. Considering whether a given sample of input leads to development in the learner's cognitive system, implies the theoretical distinction between *knowledge* and *the ability to activate that knowledge in real time*. This distinction, which Sharwood-Smith calls *competence* vs. *control*, is in line with Karmiloff-Smith's view on explicit and implicit knowledge for first language development, and with Bialystok's distinction betweeen analysis of knowledge and control of processing (although in a manner not entirely in agreement with Bialystok's discussion). Sharwood-Smith views linguistic knowledge as a systematized body of mental representations underlying the learner's language use, irrespective of whether those mental representations coincide with those of a mature native speaker of the language in question. The learner's knowledge of the system is built up on the basis of exposure, which leads him to the formation of some systematized beliefs about the language, some of which may deviate from the speaker's norms.

> "Knowing does not, then, necessarily involve knowing the native speaker's norms. So, if a learner regularly produces *goed* where native speakers produce *went*, we take this as evidence of learner knowledge that happens to deviate from native-speaker knowledge. We do not classify it as lack of knowledge but, rather, as different knowledge." (Sharwood-Smith,1993 :170).

Within this framework, learners do not "internalize" rules , they take in examples of the rule system that they use, to "crack the code". Rules are created or re-created on the basis of raw data, which must be processed and turned into mental representations. The learner relies on the end product of entirely inaccesible processes.

> "We can say that in most normal every day language use we are not especially aware of following rules; we even select many of the words automatically. We are more concerned with expressing our thoughts and understanding what people are saying. It is possible however to shift our attention to the sounds, letters, words and constructions we are using. A good term for this is going into the (slow, analytic,introspective) meta mode. The mode usually adopted for fast, spontaneous language use would be the (faster, unreflecting) *submeta* or default mode." (Sharwood-Smith, Ibid.)

Metalinguistic awareness is the awareness of language as an object. From a developmental point of view, Karmiloff-Smith sees it as an optional final step, qualitatively different from previous steps in the acquisition of linguistic competence. Perceived structured areas of language may be reorganised to be observed in a conscious way. This awareness, which may be refined by teachers through analytic activities during formal education, will be used by the the learner to create "the principles for formally expressing the observed regularities of the language system". This formalization of metalinguistic awareness Sharwood-Smith calls **metalinguistic knowledge.**

The question is how knowledge about language is activated to make information work for actual message production. Bialystok (1987) refers to productive and receptive control of the user over knowledge about aspects of the language system. That is, knowing *about* language is different from knowing *how to produce or understand* it efficiently. When the learner's linguistic

behaviour is hesitant, his problem could be either lack of relevant knowledge or actual possession of that knowledge without fluent control over it. In the context of the control of language processing viewed by Sharwood-Smith this involves both the *metamode*, where the processing operation is analytical and the *sub-meta mode,* where processing is holistic.

ATTENTION AND NOTICING IN LEARNER'S PROCESSING

Consciousness-raising and attentional issues such as noticing are underlying the whole question of the relationship between implicit and explicit knowledge. In Chapter Two, we discussed Swain's (1995) three proposed functions of output (producing language). The first to be considered was the 'noticing/triggering' role of output, or what might be referred to as its consciousness-raising function. Swain suggests that output has an essential role in developing language proficiency. The importance of noticing in the output hypothesis is that the activity of producing the target language may prompt the learner to consciously recognise some of his linguistic problems and may make the learner aware of his actual needs.

Schmidt (1990) also proposes a crucial role for noticing in the sense that it operates as a necessary condition for effective processing to take place. His claim is that a certain degree of awareness is important before material can be incorporated into a developing interlanguage system. If noticing is a necessary ingredient for learners to learn a language what are some of factors that would facilitate the activation of attentional devices in the learner ?

Schmidt (1990) discusses five influences which might facilitate noticing .

The first of these is *the establishment of expectation* around the proposed material. Unexpected events often capture people's attention. The second is *the frequency of a form,* which increases the likelihood for items to be noticed ; *perceptual salience* (also cited by Slobin ,1985, as a basic determinate of L1 acquisition), is the third influence. The more forms call attention to themselves, the greater the possibility of noticing them. A fourth factor infuencing

noticeability is *processing ability*. The learner´s skill level in processing input will determine his capacity to cope with new forms of input. This factor controls the individual 's strategy for dividing attention between grammatical form and communicative meaning during processing time. Finally, *task demands* are signalled as a powerfully determining factor of what is noticed . The implication here is that what is noticed is what is learned. Skehan (1998) makes this point very clear when referring his own experience in task-design for research purposes :

> "Tasks based on familiar information with clear discourse structure, for example of a pair of students giving one another instructions to get to their respective home, will probably have low task demands, while a task requiring imagination and abstraction, and a complex outcome, such as agreeing on the solution to a moral problem, will probably make much higher ones." (Skehan,1998 : 51)

It seems clear then that learners are not free to notice whatever they want, at all times. This situation is basically created by the circumstance that a number of factors which impinge on noticeability such as the creation of expectancy, frequency of forms and perceptual salience are external to the learner. In the case of task demands the external element will be proportional to the difficulty involved in the task per se and the learner's processing skills to adequately spare his attentional resources . The internal factors impinging on noticing would be the learner's processing skills and his ability to react, on the basis of his cognitive skills, to whatever activity is expected from him.

RESEARCH ON INFORMATION PROCESSING IN SLA

SLA research has come a long way since Krashen's proposal that comprehensible input leads the learner towards language development and extends its effects towards progress in production. The idea behind the "input-hypothesis claim" that learners need to understand in order to involve in the

learning process seems quite plausible. The problem arises when productive skills are postulated as an additional side-gain from mere exposure to the language. Krashen´s model had strong pedagogical implications in the development of the communicative approach. Nevertheless the major flaw of pedagogical activities designed within the framework of comprehensible-input is that learners seem to reach a reasonable level of fluency in their communicative competence but continue to present the traditional pedagogical drawback of an unbalanced development in relation to accuracy.

Important research carried out by Swain (1986) on the evaluation of immersion courses provided support for her claim that it is the learner's "output" that would trigger productive skills. Swain's proposals also serve as a good basis to disclaim Krashen's hypothesis that it is not enough simply to extract meaning from input to allow the learner use such knowledge as the basis for production. One of the important points made in Chapter Two was that producing the target language promotes the learner's awareness of the existing gaps in his interlanguage and, that although this awareness might only be partial , it would trigger cognitive processes that by generating new knowledge for the learner would help him consolidate another route for progress.

The appraisal of the role of consciousness-raising (Sharwood-Smith,1985) in the learner and the role of attention and noticing (Schmidt,1990) in the learning process has given way to a re-evaluation of input-processing in the light of attentional processes. Van Patten (1996) argues that the learner processes input for meaning , before he processes it for form . This kind of processing concentrates on lexical items for semantic information rather than on grammatical forms.

Van Patten believes that the processing approach is compatible with pedagogic goals to attain a correction of the imbalance produced by Krashen's comprehension-based hypothesis which was dominated by meaning

extraction. Since focus on form is not typical through input processing, research has been oriented to explore what can be done to concentrate the learner's attention to form and make him notice it. A few studies are reported in the field of input-oriented research (VanPatten and Cadierno (1993); Doughty (1991) and Foto and Ellis (1991). These studies , although limited in scope, confirmed the previous notion that input processing is primarily centred in form, but at the same time they suggested possibilities for pedagogical interventions with the clear intention of motivating conscious awareness in the learner about the importance of form in the complex understanding of meaning-form relationships for communicative purposes.

ALTERNATIVE FACTORS PROMOTING ACCURACY IN THE LEARNER

A different type of research studies looking for sources of variation in interlanguage have signalled alternative factors which can trigger interlanguage system change. Most of these studies were carried out within the Labovian framework of sociolinguistic research. One of the first studies to apply Labov's methodology to second language acquisition was Dickerson (1974). In additon to exploring the linguistic context upon the phenomenon of IL variability, she explored the phenomenon of ***"attention to speech"*** in causing IL stylistic variation. Her subjects, who were Japanese , were each given three tasks : word-list reading, dialogue reading and free speech. Dickerson's results showed that the effect of "attention to speech" was to shift toward use of more target-like variants. Tarone (1988 : 87) refers her own studies using a Labovian framework in which a variety of elicitation devices were used , some more structured and some less. The results also showed that *attention to speech* is a cause of variability in interlanguage production. But probably a more interesting study for the purposes of this research was Tarone's study with a group of twenty second language learners of English at the advanced level in the U. of Minnesota. The subjects performed three tasks : a written "grammatical judgement" task involving 30 English sentences, and two oral tasks : an oral narration task which implied telling a story to a fellow-student, and an oral

interview with a native speaker. It was felt that most attention to language form would be required by the judgement task, with the interview requiring less attention to form , and the least by the narrative (since in Tarone's judgement, the narrative is the most predictable and familiar discourse mode). In the transcription of the data, the tapes of the oral interview and the oral narrative seemed to validate the ordering of these two tasks relative to one another. There were fewer hesitations in the narrative and a more fluent performance. There were also more laughter and joking comments (in the Labovian framework, these channel cues were used to confirm a subject's use of the vernacular.) The results of this study raised serious questions because the narrative task, which was supposed to be more fluent in performance, presented more accurate forms of certain type- like articles and pronouns- than the grammatical judgement test. The style shifting which presented more accurate forms in the use of articles and pronouns in the narrative task was justified on the grounds that these formal devices are extremely important for maintaining clear reference in a narration. An analogical situation was registered in the interview focusing on the field of study, where the same clarity of reference was required in the subjects' speech. The articles and pronominal forms were less frequent in the grammar test , because cohesive devices are required more frequently in discoursive texts than at the sentence level. The value of these studies lie on the view that the generation of attention to form in learner performance is also possibly a consequence of aspects of language as a function of discourse demands.

THE INFLUENCE OF PLANNING ON LEARNER'S PERFORMANCE

Planning is a characteristic feature of language production. Through planning an individual analyses a given situation and his available resources with regards to the goal. Clark & Clark (1977) have set up hierarchically ordered levels of plans: discourse plans, sentence plans, constituent plans, articulatory programme. This organization is of some interest in relation to problem-solving and the selection of communication strategies by L2 learners

engaged in specific task performance. Miller, Galanter and Pribram (1960) distinguish between *'ready made', automatic plans*, which the individual can choose from, and *plans which are built-up by the individual 'in situ'*. If we analogise this perspective to the situation of learners' planning, we may assume that they have a stock of ready-made formulas which have been previously tested in various situations, such as purchasing, getting directions or interpreting instructions. Dehert (1983) has specifically pointed out the value of "ready-made formulas" to help learners with their speech "to run smoothly and fluently". In Dehert's perspective, the learner who sets out to plan and execute speech must try to anticipate and develop the kind of "pre-fabricated or formulaic language" that will serve as 'islands of reliability ' which will allow time for the necessary processing space required for the remaining organization of the message. On similar accounts Bygate (1988) has found that in oral tasks, language learners tend to use units of expression which function as 'wholes'. Learners will resort to this type of units depending on their processing difficulty, as a means of "buying processing time".

New situations often become the testing ground for the learner's language resources. Success or failure will guide him to continue, change parts, or the whole plan, and also reach, reduce or abandon his goal. According to Faerch and Kasper (1983) plans for ways of dealing with problematic situations are the expected behaviour from IL users. If the planner is more daring, he will have to extend his communicative resources sometimes beyond his IL system. This risk-taking attitude leads to 'achievement' strategies. The opposite attitude forces the learner to reduce his goals and confines himself to 'reduction' strategies. (already discussed in Chapter Three pp-53-55). Faerch and Kasper(1986) when discussing the situations in which a learner is aware of a problem in his knowledge system, points out to *the occasions that the learner might have for rehearsal* among the pre-conditions for learning to take place . Such occasions will provide the learner with opportunities to perceive the deficits in his interlanguage knowledge structure, a circumstance which will most likely facilitate learning.

This research study is not centered on the effects of learners' engaging in planned discourse vs. unplanned discourse. All the tasks have been set up as truly spontaneous situations which are relatively unplannable. In terms of conversational analysis (Sacks,Schegloff and Jefferson,1974), spontaneous conversation is 'locally managed'. It tends to be designed on a turn-by-turn basis.

FLUENCY VS ACCURACY : TWO COMPETING FORCES ?

The meaning of *fluency,* in the context of learner performance refers to the capacity to speak in a fluid rather than in a halting manner (Schumann,1990). This sense is identified with the processing of language in real-time, a performance dimension, rather than with language as the object of knowledge, a competence dimension. The meaning of accuracy concerns the learner's capacity to produce target-like forms. This sense is directly related to grammatical features of the target- language system.

For Faerch and Kasper (1984), fluency depends on procedural knowledge, and as such, belongs on the performance end. Accuracy is correlated with rule-based knowledge on the one hand, and with effective control of those rules for automatic communicative use on the other. Schmidt (1992) sustains that the development of skilled behaviour involves a shift with practice from controlled processing to automatic processing. On the basis of research related to the development of automatic processing Shiffrin and Schneider (1977) purport that once a task is automatized, attentional resources are freed, to perfom other tasks concurrently. This view of the contrast between controlled and automatic processing has a number of interesting implications for L2 learning as will be seen later on.

The actual language produced by FL learners, which is not necessarily fluent or accurate, is the result of two competing forces : the learner's limited processing capacity and the communication overload.

When people produce language they operate on the basis of the maxim of economy, which implies that what is said is normally said with the basically necessary elements to communicate (Grice,1975). The strong principle here is "to be effective" more than being "grammatically correct". The situation is then, along with Van Patten's claims (1996) that learners would process input for meaning before they process it for form. This claim that learners prefer processing lexical items to grammatical items for semantic information seems appropriate when language skills and conversational management are under pressure. The activation of strategies for communication purposes is largely a matter of instrumentalizing mechanisms to cope with meaning which are faster for processing comprehension and production. This happens almost entirely within the information processing part of the interlanguage model. As learners repeatedly carry out the same kinds of operations to extract meaning from situations and contexts these will go through the stages of proceduralisation towards autonomous knowledge. Given this context, it would not seem that these mechanisms are dependent on or need to interact with internal hypotheses.

It seems quite conclusively then that communicative effectiveness is achieved at the expense of accuracy. When learners have accessed information which has helped them expand their knowledge into new words or structures, there is still some way left into the process of gaining full receptive control as well as full productive control of that knowledge. This alteration of the learner's system seems to mark the transition stages between his knowledge of the system and the abiltity to use the system, although the picture of the situation in real terms seems to be much more complex than what theoretical constructs might suggest.

Returning to Skehan's proposal for analysing the problem in terms of analisability and accesibility, traditional proposals of first language development view acquisition as the consequence of the operation of innate implicit

knowledge (Universal Grammar Hypothesis). Such development requires input as a trigger and constructs underlying syntactic systems with considerable autonomy. In contrast with this period of language development, it is assumed that there is a critical period, where the operation of universal grammar constraints will no longer have the same essential role. In this sense Skehan (1995) proposes that the nature of modularity in the cases of first and second language acquisition differs. While the modularity is organized in terms of syntax and semantics in first language acquisition, in a post-critical period, the modularity is in terms of stages of information processing. Development in second language acquisition, with a now minimized LAD, would proceed via cognitive mechanisms. Second language learners may develop a rule-governed system but through conventional cognitive-learning processes. Within the picture of this hypothetical framework what resources are there available for the learner to ease the burden of communication?

Skehan (1995) points out to five available resources for the learner to faciltate communication.

1. A certain degree of underlying linguistic competence, which will ease the problems proportionally to the amount available.

2. A reasonable amount of world knowledge which will facilitate access to analogizing.

3. An ability to rely on time creating devices which will help him reduce the density of communication and communicative pressure.

4. The possibility to influence either on the content or on the manner of the communicative encounter.

5. The ability to exploit a set of strategies to 'free up' attentional resources so that other operations can be performed. Included in these is the ongoing planning that occurs as discourse unfolds and new developments have to
be adjusted along the conversation.

Skehan assumes that we have to explore how second language speakers cope with syntactic vs. pragmatic/lexical modes of communication by using resources to cope with the pressures of real time. Psychological mechanisms

are fundamental in the second language learner's task. If the need is for lexical/pragmatic communication, the learner's code does not play a central role, instead formulaic language will have a dominating role and the speaker will need to draw upon a repertoire of lexical units to operate effectively. In contrast, if planning time is available, the speaker will be engaged in a more syntactic mode, where cognitive planning will bring the required engagement with form.

> "the net result in any particular commmunicative encounter will be that either a syntactic or a pragmatic/lexical mode of communication will predominate. If attentional demands are stretching, it is likely that speech will be more pragmatic, contextual, and *lexically organized*. In other words, accesibility will be the major factor, as complexity and accuracy are downgraded in importance as the communicative pressure is met. In contrast, if attentional resources are adequate, and/or if they are well managed, then a syntactic mode will be possible, complexity and accuracy wil be feasible, and the emphasis will be on analisability." (Skehan, 1995 :104-105)

These aspects of managing communication (the demands on attention and use of resources to meet communicative requirements) represent a set of cognitive skills, which may be used automatically, but which might well be the result of awareness on the part of the user to enable more effective strategic decision-making. Such an awareness for coping with attentional demands during communication and/or systematicity in the way it is achieved, would argue in favor of a competence interpretation.

If such behaviour is regarded as occurring during communication, with different responses on different occasions reveals a concern with a performance interpretation. Skehan purports an effective compromise by regarding the operation of these processes as neither competence nor performance, but as constituting *ability for use*. Such an ability would account for the balance between analisability and accesibility as the processing dimension of real communication.

By reviewing more updated and relevant claims to this research, concerning the two questions posed by this area of SLA , we intend to provide better insights for the analysis and interpretation of the data collected for this

research in a more meaningful way.

A FRAMEWORK FOR ASSESSING PERFORMANCE

The most influential model for characterizing language is probably Chomsky's formulation in terms of competence and performance. As seen in Chapter Two, Hymes proposed a revised account of this underlying rule-based knowledge system centered in the "ideal speaker hearer" by extending the strictly linguistic domain into "the social dimension" of the language user. This model implied the adjustment of messages to the contextual and situational factors present in the speech event in terms of accuracy and appropriateness of language use.

Canale and Swain (1980) and Canale (1983) provided SLA research with an "explicit, adequate and justifiable" theoretical framework which examined the empirical status of the Chomskian proposals in terms of linguistic competence as well as the dimensions of communicative language use as suggested by Hymes. The essential aspects of the model concern the nature of communication, the distinction between communicative competence and "actual communication", and the main components of communicative competence.

THE NATURE OF COMMUNICATION

The model reflects an understanding of communication as a form of social interaction involving a high degree of unpredictability and creativity in message and form. Communication takes place in discourse and sociocultural contexts which provide constraints on appropriate language use and also clues as to correct interpretations of utterances. This activity is carried out under limiting psychological conditions and other sorts of constraints such as memory, fatigue and distractions. Communication involves authenticity of purpose and its degree of success is judged on the basis of actual outcomes. This characterization of

communication is understood as the exchange and negotiation of information between or among individuals through the use of a code and various symbols, verbal and nonverbal, oral and written, and with the intervention of production and comprehension processes.

Communicative competence and actual communication

Communicative competence is referred in this model as the **underlying systems** of **knowledge** and **skill** required for communication. **Knowledge** implies refers here to what one knows (consciously and unconsciously) about the language and about other aspects of communicative language use ; **skill** refers to how well one can perform this knowledge in actual communication. This distinction between 'knowledge' and 'skill' is apparently easily drawn and largely accepted , nevertheless, precise definitions of *knowledge* and *skill* remain elusive and controversial. A more consistent view is that both knowledge and skill underlie actual communication in a systematic and necessary way, and are thus included in communicative competence.

Components of communicative competence

This framework includes four areas of knowledge and skill : grammatical competence, sociolinguistic competence, discourse competence and strategic competence. Grammatical competence concerns the mastery of the code including the corresponding features on pronunciation, vocabulary, sentence-formation and semantics. Sociolinguistic competence addresses the extent to which utterances are produced and understood appropriately in different sociolinguistic contexts. This appropriateness refers to both meaning and form. The rôle of this component is crucial in interpreting utterances for their 'social meaning'. Discourse competence concerns the ability to handle language beyond the sentence level. It deals with the way discourse is achieved through cohesion in form and coherence in meaning. This relates to an understanding

of how spoken and written texts are organized and how to make inferences which recover underlying meaning and connections within utterances. Strategic competence, within this model ,comes into play when the other competences are unable to cope to enhance the effectiveness of communication. In this sense it is compensatory in nature when the speaker's language system fails to operate due to limiting conditions or insufficient competence.

The advantage of a model which characterizes underlying abilities in terms of linguistic,sociolinguistic, discourse, and strategic competences would be that these components can be focused more directly on specific contexts of language use. The problem in reality is that it is very difficult to connect underlying abilities with performance and language processing in a systematic way. Besides the strategic component in this model has a low-key compensatory rôle compared to the rest of the components.

A more complex model, but along the lines of the Canale and Swain's proposal was developed by Bachman (1990) . In this construct the structure of the components presents important changes. Language competence is branched into *organizational* and *pragmatic competences*. **Organizational competence** contains both grammatical and textual competence. The first refers to sentence-level organization including vocabulary, morphology, syntax and phonemes and graphemes. The second refers to discourse-level organization and implies cohesion and rhetorical structure. **Pragmatic competence** embodies a more elaborate structure of contextual organization including illocutionary competence, which branches into an ideational function and heuristic functions; and a sociolinguistic competence concerned with sensitivity branches related to dialogue or variety, register, naturalness and cultural references . But most important of all is the change proposed by Bachman for **strategic competence,** which in contrast with the compensatory rôle of the Canale and Swain (1980) model, now presents a central mediating rôle between background knowledge, language

competence, and context of situation. This is carried out through determining goals, assessing resources, planning and executing communication.

Skehan (1998) argues that despite the advance which the Bachman model presents specifically for the characterization of strategic competence, the advantages are more conceptually than realistically-rooted. Skehan's criticism is about the implicit difficulty in linking some of the proposed stages such as assessment, goal setting, planning and execution to constructs proposed for researching language processing . (For example, the psycholinguistics of second language processing emphasizes the way attention is used, how learners handle time-pressure, and how a syntactic based mode interacts with a lexicalized system -the dual-mode- to facilitate effective real-time language use.) Specifically the difficulty pointed out by Skehan (1998) is that Bachman's account "lacks a rationale grounded in psycholinguistic mechanisms and processes (and research findings) which can enable such a model to move beyond 'checklist status' and instead make functional statements about the nature of performance and the way it is grounded in competence."

Skehan's proposal is that one way of tackling the problem is "to consider how linguistic competence may be represented psychologically and what processes are implicated in its use". In this sense the competence-performance relationship ought to be treated in an alternative way to the conventional view that performance is based on competence, since that might not always be the case. Research on interlanguage production (and comprehension) has provided evidence that learners' communication can be based on a rule-system as well as on a lexicalised/ exemplar-base system, or a version of both. In this context, the rule –based system prioritizes analyzability (Widdowson 1989), as a result, communication will lead to a heavy processing burden during on-language use. Rules require complex construction processes to control their operation, in which the

structural components require detailed attention during comprehension and assembly during production. Such rule-based system is resource draining (Van Patten 1994) for the second-language learner. The exemplar-based system operates on the basis of accessibility, and it is heavily centred on the operation of a redundant memory system with multiple representations of the same lexical elements, which function as parts of a unit longer than the word. In this sense the system lacks parsimony, and given that relatively fixed phrases are involved , the potential for expressing new and precise meanings is more limited. But, on the other hand, the system gains processing speed and the number of utterance units is reduced because of their length. Besides, the units do not require excessive internal computation, since they function as integrated wholes. As a result , attentional resources may be devoted to other areas including the formulation of messages, and the conceptual concept of what is being said (Levelt 1989). Neither the rule-based system nor the exemplar system is ideal separately, because while the former emphasizes representation at the expense of processing the latter does the reverse. The former leads to the development of an open, form oriented system, while the latter emphasizes meaning as is less appropriate for underlying system change. The major issue is exploring how the two systems might be integrated to work harmoniously together

FACTORS AFFECTING TASK-PERFORMANCE

Two Knowledge sources

Probably one of the most important generalizations in SLA is that the foreign language learner presumably activates two types of knowledge sources to deal with information processing : one consisting of **internalized L2 rules and memorized chunks of language** (knowledge of the rules) and another including **strategies and procedures to process L2 data for acquisition and for use** (skills to activate knowledge for communication purposes).

According to Towell and Hawkins (1994), the procedural part of the model

would include a pragmatic and a cognitive component. The pragmatic component relates to specific strategies used by the learner to articulate discourse and to manage interactional procedures. The cognitive component of procedural knowledge would imply various mental processes involved in the internalization and automatization of new L2 knowledge. This L2 knowledge would be used together with other knowledge sources to activate communication in the L2. These processes involve both the competence and the performance end of the language model affecting learning and using the L2. On the learning side the processes account for how the learner accumulates recently-incorporated L2 rules, while the existing ones become automatized through attention to input and simplification via use of existing knowledge. The processes involved in using L2 knowledge applies to both production and reception strategies.

Levelt (1978,1989) presents an extremely interesting model to account for speech processing for language learning. Language can be decoded for **comprehension** (listening or reading) or encoded for **production** (speaking or writing). Both models are applied and modified to handle the case of processing for language learning. First on the incoming , comprehension basis, input moves from the environment into the perceptual store of working memory via acoustic encoding for processing. During comprehension, input is parsed via, phonological, lexical selection and grammatical decoding. During IL development , internalization of new input and mapping processes are continually taking place. In Levelt's terms, new lemmas (subcategorization frames for constituents and lexical entries) are being constructed in the IL lexicon. Second, on the outgoing, production basis, three processes are postulated to be underlying message production: "conceptualization", "formulation" and "articulation" . The conceptual content of a speech act is planned. Concepts are then moved to the utterance formulator via message generation involving encoding into propositions. Propositions are moved to the articulator via internal formulations involving grammatical and phonological encoding. Internally formulated utterances are moved to the environment via

phonetic encoding and articulatory processes.

Processing speed in this model is largely constrained by limitations in the capacity and availability of working memory . Two basic operations are required here : chunking language units into managable bundled sequences of words and phonemes (Schmidt 1992) and automation in the implementation of the process. The first of these operations depend on the process of "restructuring" (McLaughlin 1990) which reorganizes familiar information into economically-workable units, the second operation ,in charge of automation is then articulated with four key processes : 1) selecting appropriate conceptualizations, 2) accesing and sequencing appropriate formulations, 3) relating formulations to articulations, and 4) producing the articulations .

Bygate (1998) considers four crucial subtopics from Levelt's model which allow an integration of the psycholinguistic account into an interpersonal framework :discourse routines, lexical processing, prefabricated chunks, and pausing.

With respect to the first issue, access to conceptual information concerning *discourse routines* is important for the learner to enhance task performance. The claim is made on the basis of a study by Snow (1987) which suggests that second language production of definitions and explanations correlates significantly with speakers´ ability to perform the same task in the first language.

In relation to the second issue, *lexical processing* in the context of understanding capacities for lexical production in speech , Bygate points out to four issues : (a) the impact of background knowledge on lexical access ; (b) the extent to which the semantic networking of a speaker's lexical system can be promoted by different types of production tasks ; (c) the relationship between lexical access and the size of a speaker's lexicon ; and (d) the relationship between lexical access and morphosyntactic co-text. Levelt's (1989) model

places lexis at the center of language processing.

> "Levelt's (1989) model places lexis at the center of language processing. Whether this is an appropriate view or not , the question still remains as to how the reciprocal relationship between preceding or following morphosyntactic elements of an utterance and lexical access are integrated." (Bygate, 1998 :24)

With respect to the third issue , *the processing of pre-fabricated chunks,* Bygate believes that the observation of the presence of these forms in learner speech could allow to derive a sense of the underlying processes which affect the surface distribution of these chunks.

The fourth issue concerns the importance of the patterns of pausing in speech, since the distribution of pauses can be taken a s a clue to some underlying processes involved in speech production.

It seems that the components and processes postulated by Levelt for speech processing offer an extremely interesting account concerning the role of lexical production for understanding speech. It still remains a matter for research how the different areas which intervene in information processing do in fact interrelate. This interrelation could take place either as separate modules as presented in Levelt's 1989 model , in which one area correlates hierarchically to another , or as independent networks for processing different elements from the lexical and grammatical store. Evidence presented by Garman (1990) from different types of mistakes for the different areas underlying speech production (selecting of conceptualization, sequencing of appropriate formulation and articulation) lends support to the hypothesis that different operations are involved at each level and that the three types of processes are more or less simultaneously engaged with a slight overlapping of activity.

Bygate (1998) suggests that at all levels of planning speech processing, two major dimensions are constantly in play and in need of attention by speakers, *selection* and *combination* . Plans, in this sense , must integrate appropriacy to the levels of conceptualization, formulation, and articulation by integrating

meaning and form . Plans also need to be combined with preceding and following information. Such combinations involve frequent adaption and adjustment in the processes of monitoring meaning under time pressure with the corresponding effects on processes for information retrieval , and for key aspects of production such as fluency and accuracy.

> "...we can conclude that fluent native speakers integrate a number of processes in which selection and combination are equally important. Not only is it incorrect to stress the focus on meaning without reference to form, but equally it is partial to exclude the dimension of combination from the processes of selection." (Bygate 1998 :26)

IMPLEMENTING A BALANCED TASK-BASED APPROACH

Learners in the context of acquiring a foreign language are often restricted to a responding role. This is the typical "teacher-fronted situation" in the L2 classroom. It is not surprising to find that their opportunities for participating productively are constrained. Interactions derived from controlled language practice such as pattern drills or conversation practice are likely to be characterized by strict teacher control.

Illustrative evidence has been provided by Swain (1985) that comprehensible output contributes to acquisition in that learners need to be pushed into producing output that is concise, coherent and appropriate in order to develop communicative competence. One of the factors that seem to determine the quality of learner participation in classroom settings is the degree of control the learners exercise over discourse. In practice, tasks have proved to be the productive kind of activity designed to engage the learner in using the language communicatively or reflectively in order to arrive to an outcome other than that of learning a specified feature of the L2. Task-based approaches represent a good case as part of a framework for assessing these proposals because :

(a) they involve activities that are focused on meaning.

(b) they can be more accurately evaluated on the basis of their outcome.
(c) they are centred on situations which are closer to real-life.

It is important to identify a number of task variables that affect participant performance. We discussed at the beginning of this chapter that important developments in cognitive psychology have stressed the crucial role of attentional resources for language development (Schmidt,1990 ;Van Patten, 1990). The learner has to struggle between competing decision-making to give priority to meaning at the expense of form or viceversa. These proposals have interesting implications for second language acquisition research and language teaching as a whole and particularly in the context of learning experienced in a more interactive way and closer to real-life communicative situations.

Actual performance is complex and multidimensional due to the competition involved in internal processing resources. It was also previously discussed that the language learner is faced with attention problems, a limited developing interlanguage, and time-pressure to communicate. In this sort of scenario, native and non-native speakers alike resort to comprehension and production strategies (Skehan1992). Such **strategies,** which are implemented to crack the code, may try **to convey meaning while by-passing form.** Research on communication strategies, discussed in Chapter three, stressed learners' creative resources to exploit general context from communication together with linguistic cues to activitate comprehension. They resort to communication strategies to prioritise meanings and relieve attention on forms for more effective production.

According to Levelt (1978), performance has to be analysed in the contexts of operation. Three significant contextual factors, are identified by him, which condition speech production :demand, arousal and feedback . 'Demand' is directly related to the amount of processing required by a given task. Achievement in a given task will depend on high or low demands. 'Arousal'

refers to the speaker's emotional response to a task. ´Feedback ´ can influence performance simply in terms of the quantity and quality provided to the performer. All these factors will be reflected in learners' production, either positively or negatively, in terms of fluency accuracy and complexity . These three sensitive indices to pin down performance, suggested by Skehan (1996) to compete for processing capacity , will provide the empirical framework for this research.

The major focus of discussion in Chapter Four has been on theoretical models and research studies which suggest that psycholinguistic factors and processing conditions have an extremely relevant role in characterizing the learner's attempts to learn the language system and the learner's attempts to use the system more or less succesfully. In the next chapter this emphasis is on actual learners' performance while coping with specific tasks. Chapter Five will focus on the main aspects of the research design, such as the subjects , the time-dimension, the nature of the tasks chosen to implement performance, in the light of theoretical principles and related research. There will also be a review of the importance of task-based instruction as a potential source for implementing progress in learner's development .

CHAPTER FIVE

THE RESEARCH FRAMEWORK

This research project is an attempt to study adult interlanguage development in people from different source languages acquiring English as a target language during their stay in London. The purpose of the study is to analyse the collected interlanguage data resulting from dyads of sixteen non-native adult learners performing three specific task-types: description, narration and problem solving, at three different points through a nine-month period of observation. The study concentrates on interlanguage variability with a focus on psycholinguistic variables such as time-pressure, organization of discourse structure and complexity of meaning to be conveyed. There is also a particular concern about developmental strategic patterns in individual learners.

The study has a multifactorial design and analyzes the effects of tasks and implementation conditions on a range of measures such as fluency accuracy and complexity affecting foreign language learners' performance. The research concentrates on the complex relationship established between the following factors :

1) the cognitive demands of the different tasks which are reflected in the use of transactional vs. interactional language.

2) the differing task demands of a focus on form and a focus on meaning.

3) the differing strategic choices on the basis of task-types and task-demands.

4) the progression of developmental stages in task-performance.

I will examine these interrelationships for a better understanding of results and will finally consider what would be the possible effects of task design and its pedagogical implications.

LOCATION AND SETTING

Two adult language centers were clearly the most adequate for the purposes of this research: the Hampstead Garden Suburb Institute and Westminster College. Both centers prepared students to pass language exams at First Certificate and Cambridge Proficiency level and maintained a fairly large adult-student registration with a rich variety of first language background. These schools seemed appropriate for the purposes of this research project because they presented the largest number of potential candidates contemplating a minimum period of stay of nine months in England.

The recording sessions , based on dyads, were held in the interview room of the Hampstead Garden Suburb Institute and in the audio-visual room of Westminster College.

A Panasonic Camcorder was used for videoing all the sessions, which were programmed to last approximately one hour, allowing 15 minutes per consecutive task, with short intervals for briefing the subjects on the procedures. The camera was set at an estimate distance of 4 to 5 meters away from the speakers and it was virtually ignored during the exchanges. The speakers were seated at a comfortable distance to enable face-to-face contact, but without allowing them to see each other's task pictures. Some 'zooming' techniques were used at certain points of the dyads to capture certain gestural aspects from either of the speakers at appropriate moments.

THE PARTICIPANTS AND THE SELECTION OF DYADS

Sixteen adult learners of English from various language backgrounds (Italian, French ,German, Turkish, Hebrew, Portuguese and Spanish); five male and eleven female, were chosen for this project.

The participants had a mixed exposure to foreign language acquisition. All of them had the experience of instructed language acquisition in their own countries during their secondary school, some of them had English at college level as well. At the time of this research study, they had come to London with different projects in mind. One common target in all these learners was the fact that they wanted to learn English during their stay in the UK. Their major motivation was that they had the opportunity to pick up the language in the context they were living (either as 'au-pairs', waiters, hotel staff, employees of foreign firms, housewives accompanying their husbands on scholarships or temporary jobs etc.) during their stay in London. As a reinforcement to their naturalistic exposure to language, they also registered in the regular courses which prepared foreign language learners for the Cambridge First Certificate offered by the city council in community schools. This provided participants with the opportunity of the more systematic instructional contact experienced in schools.

In terms of their language proficiency, their schools had classified them through very similar procedures (test scores and interview) as intermediate level 'pre-first certificate' candidates. The purpose of the school selection was to assess their potential capacity for taking a course to prepare for the Cambridge First Certificate Examination. However, in spite of their 'intermediate level' condition, it turned out that the students were perceptibly different in their language abilities, and from observing their participation in class during the first month of the project some appeared more fluent than others. On the basis of their actual classroom performance and their teacher's evaluation for the course work, the group presented variable proficiency levels: ranging from lower to upper-intermediate.

The age range of the participants was between 21 and 42. Although the age variable may be connected to strategic use, this aspect was not considered particularly relevant for this research group. With the idea of avoiding extreme

conditions, most of the learners in the dyads were paired within a close age range. For this reason, age differences are not likely to establish distance.

The fact that they belonged to the same class and had similar objectives made them closer in contact and treatment. The participants of the project were in most cases people with job experience who acted in a friendly way and sharing common ideas as a group. The following chart shows their native language, the activity performed in London (with an asterisk) or alternatively at their home country (no asterisk) and the gradation of their communicative skills at the initial stage of the project.

PARTICIPANTS		L 1	Activity	Communicative Skills
1	Giovanna(42)	Italian	Biologist	Very good
2	Charo (25)	Spanish	Business Admin *	Very good
3	Cecille (23)	French	Usher at Opera House*	Very good
4	Maria (24)	Spanish	Accountant	Very good
5	Mauro (25)	Italian	Chef *	Very good
6	Elana (33)	Hebrew	Secretary *	Very good
7	Rosa (28)	Spanish	Secretary *	Good
8	Serico (25)	Portuguese	Businessman	Good
9	Inalda (27)	Portuguese	Hotel manager	Good
10	José (30)	Spanish	Hotel waiter *	Good
11	Marcela (25)	Spanish	Shop assistant *	Good
12	Daniel (31)	Spanish	Teacher *	Fair/Good
13	Johann (28)	German	Mechanical engineer	Fair /Good
14	Elif (21)	Turkish	College student *	Limited
15	Ozgul (21)	Turkish	College student *	Limited
16	Mujgn (21)	Turkish	Secretary	Limited

Table 5.1 : Assessment of communicative skills

Among the prevailing motivational factors in the group for learning English, the following could be mentioned as central: job opportunities within the EU and their own countries, further educational opportunities, or simple 'accommodation' purposes to the community they were immersed in during their stay in London. Several informal interviews were held either with individuals or small groups patterned to maintain contact with the group along the nine months, as well as to create a friendly atmosphere to get to know the students better. The information obtained from these casual meetings was extremely valuable. The interviews provided the researcher with interesting

complementary information about the students themselves, their relationship and degree of acquaintance with the other subjects of the group, their individual progressive attempts to 'accommodate' to the culture, and some idea of their social integration into the target language community.

With the intention of providing a different perspective from the traditional NS-NNS interactions of previous research, the dyads for this project were planned between two non-native speakers of intermediate level proficiency in English but of different L1 backgrounds. The choice of having a variety of language backgrounds among the subjects as opposed to having a group of a common L1 background, stems from the advantage of making speakers of different L1's exchange messages by resorting to English as a lingua franca. In this way, the fact that the interlocutors did not share the same native language would lead to a more genuine use of resources in the target language.

A number of studies (Long ,1981; Doughty and Pica ,1986 ; Newton, 1991) have supported the idea that two-way tasks result in increased negotiation of meaning. Long has specifically claimed that some tasks result in more topic and language recycling, more feedback incorporation, more rephrasing and precision. Several other studies (Gass and Varonis ,1985 and Porter, 1986) confirm the value of interlanguage talk as a source of opportunities for meaning negotiation. From these studies we may obtain reasonable support to the circumstance that interaction between learners can provide conditions to facilitate acquisition.

The idea of pairing male/male as well as male/ female introducing the sex variable was applicable in some cases only, due to the shortage of male candidates. A superficial analysis of input-generation obtained from negotiations at *Time One* made it advisable to try alternative pairings of matching subjects who showed more resourceful use of language with those that seemed to be less productive. This variation of using more proficient with less proficient participants was motivated by Porter's suggestion (1986) that intermediate learners got more input and better quality input from advanced

learners; conversely advanced learners get more opportunities to practise when they are communicating with intermediate learners. Porter feels that these mixed pairings have something positive to offer to both sets of learners. Yule and McDonald (1990) also examined the effects of proficiency in mixed-level dyads in a study involving a task which required the resolution of a number of referential conflicts. In some of the interactions the provider of information was of lower proficiency and the receiver high proficiency (L>H) and in others the opposite (H>L). They found that the L>H interactions were much longer than the H>L interactions and in this sense negotiated solutions to the referential problems were much more likely to take place in the L>H than in the H>L condition. As a conclusion of these mixed ability pairings , success is more likely to occur if the lower level speaker handles the key information to be communicated. The research suggests that learners will benefit from interactions in mixed ability pairings since they will have more opportunity to speak, to negotiate meaning and content, and to construct discourse collaboratively.

THE IMPORTANCE OF THE TIME DIMENSION: A LONGITUDINAL DESIGN

One of the decisions in connection with a study of learner performance is related to whether data will be gathered cross-sectionally or longitudinally. Both methods have their strengths and weaknesses. The advantage of longitudinal research is that the project is directly concerned with the observation of development in the same learners from beginning to end. The main problem involved is how time-consuming the procedure is, on the one hand, and there are risks of drop-out rate among the learners, on the other. The alternative is cross-sectional studies, which provide reliable information about general patterns among large bodies of learners. The disadvantage here is that since data gathering is limited to a single-point in time, the lack of information concerning time progression obscures insights about patterns of variation over time and across individuals. Cross-sectional studies do not study the same learners, hence, strictly speaking, they are not concerned with 'development' as such.

Longitudinal research in the past has been the source for reappraisal of biased interpretation of results obtained through cross-sectional samples, qualifying their implications as in the case of morpheme studies reported in Chapter One. The orders of acquisition in several longitudinal studies (Rosansky, 1976; Huebner,1979) did not correlate with the orders of accuracy of use obtained in cross-sectional research. Relatively few longitudinal analyses have examined whether specific problems prevailing at specific points in time persist longer than other problems (Taylor, 1975; Wode,1981). It was basically with the development of data-analytic procedures related to the dynamic aspect of language change that the 'product' orientation of early IL research, such as the morpheme studies (Hakuta, 1976) and error analysis, became methodologically suspect. Such an appraisal was possible within the longitudinal perspective.

There are particular advantages in using a longitudinal research design to study the development of learner's interlanguage. One of those advantages relates to the viability of assessing the consistency of use within individual learners. Quantifying the frequency of use of certain language forms to the advantage of others assists the researcher in building up a more reliable profile connected with the individual learner's choices under specific variables such as type of interlocutor, task-type and degree of task difficulty.

The reliability of such profile derives from a more strengthened perspective, both qualitatively and quantitatively. The picture of the degrees of difficulty obtained from the learner's performance at different moments becomes more conclusive along the time dimension. Such difficulties, which may have different causation (lexical choices, task-shifting, inadequate feedback, limited interactive negotiation) are most probably the circumstance motivating the learner's choice of language forms. The strategic selection between more conceptual than linguistic processing, more fluent vs more accurate language, more transactional over interactional language, analysed in the longitudinal perspective help reveal individual patterns of performance behaviour.

Another important problem directly connected with consistency of use is the issue of whether certain types of behaviour can further or hinder development in a target language. When the communication demands made upon the learners are too far beyond their current competence, they are forced to adopt alternative paths to overcome communicative problems. The data-analysis may provide an interesting profile of individual strategies which could lead to specific patterns of use underlying performance through stages one, two and three.

Longitudinal studies are frequently associated with descriptive or qualitative data, implying that quantitative or statistical measures can only be performed with cross-sectional studies. However, Gass/Selinker (1996) suggest that one can easily conduct statistical analyses on longitudinal data and one can easily provide descriptive analyses of cross-sectional data. It is furthermore mistaken to assume that longitudinal data cannot be generalized. One may be able to put together a profile of learners based on longitudinal studies.

The time length of nine-months was decided on the basis of minimal advisable time for tracing significant development. Limitations of administrative nature made it unwise to go beyond that limit since there is an estimated two-month gap between one academic school year and the next and there was no guarantee that the same subjects would return. The most common problem in a longitudinal study is coping with participant drop-out. As a means of preserving an ideal number of around sixteen subjects, twenty four candidates were chosen which corresponded with twelve pairs. One of the problems of longitudinal studies is to keep the same subjects .but along the nine months of the project as it turned out, there were a few drop-outs and only eight pairs completed the three tasks.

The data was collected on three separate occasions: at the end of the first month, at the end of the fifth month, at the end of the ninth month. The choice of collecting data for the first stage at the end of one month was made to enable students to settle into school. On each data-collection visit, each dyad completed three tasks : (1) description of objects, (2) narratives and (3)

problem-solving. The focus of the longitudinal character of this research is to trace performance behaviour in subjects when coping with very similar tasks in the face of communication breakdowns For the sample to be representative, it was important to include very similar tasks within the same type throughout the three points in time, allowing a reasonable interval to reveal any developments over time if any.

DATA GATHERING PROCEDURES

Two basic data gathering procedures are available in SLA research: observation and elicitation (Miller, 1987). Observation involves situations in which the language exchanges have not been produced for the purposes of the research, and the researcher has rather managed not to intervene as a means of maintaining the 'authenticity' of the situation. The great disadvantage of this 'naturalistic' type of data collection is that instances of the particular aspect of speech behaviour the researcher might be interested in analyzing 'may occur so rarely and so unpredictably that large samples are difficult to come by.' (Wolfson,1986).

The second approach to data gathering is elicitation. All techniques aiming at structuring and controlling the situation which will generate the language produced for the specific purposes of the experiment fall within this category. Within the range of possibilities we find games, pictures, role-playing, simulations, as well as a series of other elicitation instruments which vary in sophistication. Most research in language acquisition has taken place by using these techniques and indeed the present research will follow this tradition. However, the method can contain the major pitfall of being 'non-authentic'. The issue of 'authenticity' has somehow been hinted also in the perspective of classroom activity. It is through the attempt of 'engaging' the learner in more close to real-life activities that provision is being made for a better challenge for promoting 'interaction'. The key to the impasse has been finding a purpose for communicating to promote the required spontaneity. Such a purpose has come via opportunities for interaction, normally created through an information-gap. This has been the principle behind classroom

research and group interaction activities as illustrated by Pica and Doughty (1986) and Bygate (1987,1988). Important attempts to improve elicitation procedures in language production within the issue of more authentic communicative goals derive from the application of the principles of a 'task-based methodology'. This will be the major concern of the discussion in the following section.

RATIONALE FOR A TASK-FRAMEWORK

Probably one of the most important factors to take into consideration in eliciting data is task. The notion 'task' has become very important in SLA and second language teaching (SLT) research A task-framework for productive elicitation of learner language can be justified both from the *social* as well as from the *cognitive* dimension of language learning. In Chapter Two we reviewed the importance assigned by interactive studies of SLA (Hatch, 1978; Long, 1985) to language learning assisted through social interaction and meaning negotiation between learners and their interlocutors. Long (1989) stresses the value of the implementation of tasks as productive activities for generating effective negotiation of meaning, on the one hand, and for triggering language-learning opportunities, on the other. According to Long, task-based interaction engages the learner in a discourse-based process for the exchange of information and enables interlanguage development through feedback opportunities for him in the form of clarifications, re-checks and repetition of forms when communication breaks down.

An interesting alternative to account for the implementation of tasks comes from two important aspects of a cognitive approach: the thinking required and the performance conditions. The first deals with the processing load for proper structure organization during task-performance while the second reflects the communicative pressure under which the task needs to be done. Appropriate tasks will necessarily have a relationship with the real world by giving learners something to work on which relates to real life. If that is the case, there will be

a cognitive component for the assessment of task difficulty, and meaningful associations about the way processing factors operate.

The case for tasks, from a cognitive perspective, has already been put forward in Chapter Four. Van Patten (1990) and Schmidt (1990) have emphasized the importance of models of attention to second language learning. The implication in their proposals is that what is learned is what is noticed, so in order to improve the learner's limited processing capacities, attention should be prioritised. *Task demands* are signalled as a powerfully determining factor of what is noticed. Van Patten's (1990) concern is that since meaning takes priority over form in communicative activities, when the learner is under processing pressure, form is displaced from focus. His proposal is that processing conditions need to be pedagogically manipulated regarding the learner's overall capacity and attention to maximize an appropriate focus on form. This could be achieved through the implementation of an appropriate task-designed syllabus which would redress the direction of attention to meaning to attention to form.

IDENTIFYING TASK-PROPERTIES

Tasks may be analysed, chosen and sequenced on some principled basis. Long (1989) distinguishes between one-way tasks, in which one participant holds the crucial information, and two-way tasks, in which all participants make important contributions. Long also categorizes tasks from the perspective of their solution. If the task does not require a fixed solution, it is open-ended, while if the task requires a negotiated, agreed solution, it is a closed task. Pica, *et. Al* (1993) have provided a framework for distinguishing and elaborating interactional activity and communication goals. This framework provides links with the potential impact on opportunities for learners to gain assistance with comprehension of L2 input; to receive feedback on the comprehensibility of their interlanguage output; and to respond to feedback through modification of their interlanguage. In this framework tasks can be analysed under the following headings :

1) Interactional activity
   - interactional relationship
   - interactional requirements
2) Communicative goal
   - goal orientation
   - outcome option

Number One refers to the distribution of information among the different participants in a task and how they are to act on this information. Number Two relates to whether the different task participants share goals or have different goals, and whether goals contains only one acceptable outcome or whether many outcomes are possible.

Pica , *et al.* (1993) have analysed the consequences of the difference of information distribution among task-participants and they report that tasks containing more symmetrically balanced features will generate more interactions, more turns, and greater negotiation of meaning. In this framework, the following four conditions would be required :

1. Each interactant holds a different portion of information to be exchanged and manipulated in order to reach the task outcome.
2. Both interactants are required to request and supply this information to each other.
3. Interactants have the same or convergent goals.
4. Only one acceptable outcome is possible from the attempts to meet these goals.

The issue that negotiation features found in task interactions are linked with acquisition processes themselves is debatable. Research results used to confirm or disconfirm this hypothesis are usually dependable on whether the individuals engaged in negotiations will generate the kind of interaction that will motivate interlanguage modification. This aspect of research results does not invalidate the important scheme brought up by Pica et al. to classify tasks.

Skehan (1996) developing work by Candlin (1987) and Nunan (1989) proposes a scheme which distinguishes between tasks on the basis of three areas : code complexity (language), cognitive complexity (cognitive processing, cognitive familiarity) and communicative stress (performance conditions). The major contrasts offered in this categorization are established between the language required , the thinking processes and the performance conditions for the task. Some tasks will require simpler language than others. *Code complexity* will vary in the complexity, redundancy and density of the language required to fulfill the task. From the perspective of *cognitve complexity*, familiarity with the task will allow access to existing knowledge through "packaged " solutions to the tasks, while tasks bringing in new problems, will require more cognitive processing to work out solutions. If the task does not require a lot of attention to the task-problem itself , there is scope for a focus on form ; if processing has to be directed at the cognitive problem involved in the task, there is less attention left to focus on form. *Communicative stress* involves the performance conditions for coping with the task. The factors involved here are directly related with processing conditions. The urgency required for task-completion affects the learner's perception of the time-pressure in the context of task-difficulty to achieve targets. This sort of scheme, which is manageable enough, provides a clear framework to research cognitive processing-conditions in learners performing specific tasks over time.

TASK-FEATURES ,GOALS AND OUTCOMES

There has been extensive task-based research over the last decade or so. One of the main lines of such research has concentrated into specific task features such as task information, task operations, and task goals.

Brown *et al.* investigated various task design features in order to establish degrees of difficulty. They proposed a two-dimensional matrix which influences task difficulty. The first dimension is related to the nature of the information underlying each task , the other dimension concerns the scale of the task and

the interrelationships between its elements. The easiest tasks on the first dimension are information task-types. In these activities information does not change during the course of the activity. The task is essentially a one-way information-gap type such as the instruction to produce something (as in Wagner (1993) referred in Chapter Three) Another procedure is to instruct a speaker to describe a limited set of objects (such as a Christmas tree stand), to a listener who must discriminate from a set of still photos, the one which fits the description (Tarone,1986). This sort of tasks are essentially static. On the next range of difficulty we find dynamic tasks, which are characterised because the elements involved in the task change during performance. Tasks involving narratives of some sort require a certain number of characters and elements involved, which must be kept referentially-clear . At the same time, there is sequencing of the events as well as causal relations that take place under probably changing scenarios. At the most difficult end of the scale, the most difficult tasks for conveying information are abstract tasks, which usually contain decontextualized elements that must be provided with a context and a situation. Brown's *et al.* example for this task type is expressing an opinion .

Duff (1986) examined the effect of task type on the input and interaction in NNS-NNS dyads. Two types of tasks were the focus of this study : problem-solving tasks and debates. Duff's study intended to validate the notion that some task types offer advantages over others because they show qualitative and quantitative differences in the speech triggered in the learners' interaction. In Duff's analysis, the quantity of input is measured in terms of the number of words and communication units (C-units) produced. The quality of input is measured by calculating the total values for features such as turns, types of questions, and syntactic complexity (S-nodes). Repetitions and reformulations, although useful measures of interaction, were , unfortunately , not used in this study. To summarize the findings , problem-solving tasks and debates were differentiated according to the focus of the interaction and the direction or goal of the negotiation produced . Although both problem-solving and debates could be considered as two-way tasks (exchange of information is required from all subjects), and both tasks share some common features,

there were predictable differences between these task types. In both task-types, negotiation indeed took place. Both task types were accompanied by various clarification techniques such as questions, repetitions, reformulations and explanations of different kind. Furthermore both tasks generated the level of verbal and logical reasoning expected from abstract tasks. Nevertheless, from an interactional perspective and on the basis of discursive differences, *problem-solving tasks* , more convergent in nature than *debates*, presented the kind of interaction associated with "comprehensible input", which supposedly, in the interactionalist view, fosters learner's acquisition. Duff acknowledged the fact that , despite this specific claim, it might be wiser to suggest that both task types could perhaps be complementary in pedagogic and psycholinguistic value in second language instruction and SLA.

Foster and Skehan (1996) have concentrated on the influence of task-type and planning on second language performance. Their research-framework focused on three tasks : a personal task, a narrative and a decision-making task. The first task draws on familiar information which requires little transformation to enable task completion. The second task was a narrative based on a series of pictures with common characters but no obvious storyline. This task makes greater cognitive demands since the story draws on material which is introduced by the researcher (therefore, unfamiliar to the learner) and possibly requiring some transformation. However, there is some inherent structure in a narrative as such, which provides support for only a reasonable amount of cognitive load. The third task involved decision-making from the perspective of a judge upon the appropriate punishment for a series of crimes. The task required on-line processing and unpredictable interaction with another participant in the context of conflictive and unforeseen situations. Foster and Skehan reported that the personal task generates less complexity (as indexed by a subordination measure) than the decision-making, with the decision making task producing less complexity than the narrative task. The narrative generated the lowest level of accuracy (with an average of 61% of clauses error-free) with the other two task types generating language at very similar levels (on average 69% of the clauses were error-free). The greatest amount of

fluency was registered for the personal task with very similar indexes in this respect for the other two tasks.

Foster and Skehan (1996) also explored complexity, fluency and accuracy effects for planning . They used three planning conditions and reported that a guided planning condition favoured complexity, while unguided planning (simply giving subjects planning time without suggestions as to how to use) favoured accuracy.

The difference of theoretical perspectives examining important aspects related to task-based research is just a reflection of the complexity involved in connection with issues about language use and development. But it is through the examination of these different viewpoints and comparability of research findings that progress is currently being made.

AN ANALYSIS OF THE TASK-FRAMEWORK FOR THIS RESEARCH

This research design has prioritized the assessment of the cognitive aspect of language learning over the interactional view which stresses negotiation of meaning as a source for language development. Although extensive research has been done on the developmental value of negotiation of meaning for language learning, the justification of many of its research claims has been challenged on the basis that negotiation of meaning as such will not necessarily bring about more balanced language development because it favours fluency to the detriment of accuracy (Aston, 1986 ; Foster, 1998). Negotiation of meaning might produce finely tuned input for language development (Long 1988), and most probably promotes good opportunities for the learner to try hypotheses about his interlanguage, but it does not necessarily trigger learner control over form.

According to Skehan (1998) although current research findings are not comprehensive and systematic enough, they are better than nothing. He proposes "the utility criterion" concerning task design, "the intention is that tasks can be designed and relevant support activities can be chosen to make

the use of structures easier without their being compulsory." This proposal will be discussed in more detail further below in relation to the fluency, accuracy and complexity factors.

POTENTIAL PROBLEM SOURCES IN LEARNERS' PERFORMANCE

The analysis of the conversational abilities of this group of intermediate level learners requires an assessment of various factors related to communicative competence. These factors include lexis, discourse structure, language complexity, fluency and accuracy in the context of performance of discourse-framed tasks. Such an analysis helps reveal learner pathways towards the solution of comprehension problems as well as strategies for dealing with on-line production problems. By contrasting performance at different points in time and across different tasks, some insights are provided about problem sources combined with possible routes to strategic solutions. These solutions, through consistent use over time, provide the learner with a potential tool for 'repairing' transitory communication gaps but at the cost of impoverished accuracy. This implicit learning of strategic shortcuts for communication problems (accessibility) may provide through repetition of problem-solving formulae better opportunities for restructuring (analysability) which is at the basis of development of language growth and complexity. The following section targets the importance of learners' use of strategies.

THE STRATEGIC FACTOR : The Use of Communication Strategies

Researchers seem to converge on one major point, effective strategy use involves not so much how often learners use strategies as *when* and *with what purpose* they use them. It is also most likely that strategies will provide better solutions when they are deployed in an organized fashion. An interesting point to be established through research in this area is related to what groups of strategies function for what purpose and what specific problem-areas they are applied to. Specific connections are meant to be established between the effects of tasks in the selection of strategy types. Tasks will provide interesting

challenges for learners to choose between more holistic strategies or more or less detailed analytic strategies to solve communication problems and reach communicative goals. There also remains an open question as to whether strategic use will be more concept or code-based depending on task difficulty and language development. But most challenging of all will be the analysis of proposals for potentially effective discourse-based strategies, a problem which has not been targeted in depth in previous CS research work.

THE FLUENCY, ACCURACY AND COMPLEXITY FACTORS

Three important generalised measures have been used in this research as sensitive indices for pinning down influences on task performance, namely **accuracy, complexity and fluency.** The application of these devices has been made following Foster and Skehan 's (1996) general framework which draws upon existing research for assessing task-based performance. These three measures derive from a theoretical construct based on a dichotomy exploited by Widdowson (1989) concerning "knowledge of language" (analysability) and "ability for use" (accessibility). The first relates to the systematic nature of interlanguage and the way it is organised so that rule-based performance can result. The second is concerned with the language available to the user during communication.

> "Availability, in this sense, may well imply a dual-coding system such that although aspects of the language system may be analysable, they may also be stored redundantly in a memory system with the additional representations reflecting "chunk " based organisation which is more practical for retrieval during the pressure of real-time organisation." (Skehan,1992)

Complexity, the first of these indices, concerns **form** but relate to it with a significant difference in emphasis.

> "Complexity emphasizes the organisation of what is said and draws attention to the progressively more elaborate language that may be used, as well as a greater variety of syntactic patterning. Complexity is likely to reflect a willingness on the learner's part to engage in restructuring as more complex subsystems of language are developed. " (Foster and Skehan,1996)

In this sense, **complexity** emphasises elaborateness, and risk-taking, on the part of the learner's effort to cope with tasks among other things. These factors reflect language-use at the cutting-edge of interlanguage development and the learners' potential to stretch their available underlying competence when the communicative needs arise. We must discriminate between this concept, which is learner-centred, from the concept of complexity used by Robinson (2001) in the context of tasks, which refers to the task dependent and proactively manipulable cognitive demands of tasks.

The second index related to form is **accuracy.** It focuses on error-free language with the idea to achieve more target-like use of forms. Error-avoidance reduces the language user's actual language-production potential, possibly at the expense of less complexity. This mode reflects a more conservative orientation of the speaker to attain greater control of language. While attention to accuracy , which concerns control, may result in using a less challenging level of interlanguage, complexity may capture a greater willingness for risk-taking. This factor might have an important bearing on potential for interlanguage change and opportunities for development.

The third index , **fluency** , reflects the primacy of meaning and the capacity to cope with real time communication (Schmidt,1990 ; Skehan,1992, 1996). Fluency concerns language production in real-time, by drawing upon "a lexicalised repertoire of exemplars" to achieve the necessary capacity to handle processing speed.

> "It may therefore prioritise lexicalised language (Ellis,1987) and the way learners, during tasks, avoid rule-based, constructed language, instead preferring to use more idiom-based language (Sinclair,1991) to enable communication to proceed more smoothly". (Foster and Skehan,1996)

Fluency is an indicator of effective planning and it reflects the accessibility of the learner to his available resources to organise his ongoing discourse effectively.

The general framework used for the analysis of the data generated for this research follows the lines proposed by the Foster and Skehan model.

The three dependent variables involved –fluency, accuracy, and complexity -are operationalised as follows :

Fluency :

(a) ***reformulations:*** repeated words, phrases or clauses with some modification to syntax, morphology or word order.

(b) ***replacements :*** lexical items which are substituted for another.

(c) ***false starts:*** utterances which are abandoned before completion.

(d) ***repetitions :*** words phrases or clauses which are repeated with no modification whatsoever to syntax or morphology.

(e) ***pauses:*** a break of 1.0 second or longer either within a turn or between turns.

(f) ***silence total :*** the sum of pausing time in each transcript.

(Skehan,1996)

The different variables have been colour-coded while transcribing the data for visual facilitation as indicated above (replacements<purple> ; false starts <blue> ; reformulations <green> and repetitions <yellow>)

The criteria for measuring accuracy is implemented through clauses which although error-free, could be short in length to allow for a better scope among learners with different linguistic resources.

Skehan (1996) suggests that **fluency** is perhaps the most difficult index to cope with because "there is no generally accepted operationalization of fluency". Two important aspects of fluency are considered by Foster-Skehan to consider the most adequate measures. One is the capacity to engage in continued performance. Pauses, total silence and repetition-hesitation are taken to reflect the capacity to produce ongoing speech without encountering problems. These would probably be the most appropriate indices for this

aspect of fluency. The other aspect of fluency taken into account is the need to engage in more frequent repairs of breakdown in speech. This can be measured through indices of *replacements, false starts, and reformulations,* which are taken to reflect fluency in terms of the amount of repair that is needed.

The other two indices to be operationalised in the most effective way are : **accuracy** and **complexity** . **Accuracy** is best measured through the proportion of error-free clauses. This more generalised measure may generate larger and more reliable samples of language. This measure will also be able to show differences between the performances produced by different experimental conditions. **Complexity,** to be a satisfactory measure, should apply to the number of subordinate clauses per utterance, on the basis of ***communication*** units, as opposed to the more traditional T-unit criteria of measuring the number of subordinate clauses attached to a main clause. The **'c-unit'**, which was introduced by Brock (1986), provides referential or pragmatic meaning and allows for ellipsis. The exclusion of ellipsis is often an unsatisfactory procedure in the case of "spoken interaction where ellipsis quite naturally abounds". This perspective allows the c-unit to function as a more sensitive measure than the T-unit, and is more appropriate to capture complexity within the language produced. Subordination measures, within this framework, are more reliable indicators of overall complexity and provide a reasonable picture of the learners' internal structuring of speech. Complexity is measured then as the amount of subordination divided by the number of communication units.

The proposed framework reflects the way learners organise discourse by concatenating ideas built around one cohesive piece of information, and provides an empirical tool to quantify the amount and quality of the language produced. Communication-units are counted on the basis of language performance during five minutes of each task.

The following example from the analysis of one description may illustrate the point. The parentheses indicate first the number of communication units ***(1u/6cl)*** immediately followed by a slash which adds the number of clauses in that C-unit ; next to it in special brackets is the indication of the number of error-free clauses ***<4>.***

Mauro: sea -band..this is a..**this is a band**..with a..isa..**(1.0)**
1
it's very difficult to explain that..isa-aa like.. **(1.0) uh**
2
acupressure point..you know..**it's a pressure point**.. you know
3
you put here (showing with a movement around the wrist)..this
4
band..like that..see that and uh..**it help you not to be sick**
5
when you go on sea ..you know..on the waves..you know..
6

(1u/6cl) <4>

THE 'TRANSACTIONAL / INTERACTIONAL FACTORS'

Language users when making use of spoken language basically do two things *(a)* they convey information (transactional use) and/or *b)* they establish social contact to maintain some sort of relationship typical of human beings as members of a community (interactional use) .

Social chats seem to be *interactional* in nature and are usually characterized by constant shifts of topic and a great deal of agreement on them. But the kind of language required for the performance of tasks in this research has a primarily *transactional* function. In these exchanges the speakers had to concentrate their attention on how certain gadgets operate in the "real world" (descriptive task) , how to narrate a story (narrative task), or how to explain the transgression of logics in specific situations (problem-solving task). The conversational structure of these "messages" is marked by an interest in putting the meaning across and reaching understanding.

The incorporation of the two indices related to transactional and interactional language use will serve as a fine-tuning device in order to substantiate information concerning *the amount of cognitively-oriented* information used by the participants while performing their tasks as opposed to their more *socially-oriented information* embedded in the performance of the same tasks.

Two possible interpretations could be ventured in the context of learner strategic use of interactionally –oriented language when coping with tasks:

(a) the learner has a clear understanding of the task structure and is able to cope appropriately with the basic information and resorts to interactional language as an appropriate expansion of the task target by exploring additional conversational information for socializing purposes.

(b) they cannot cope with the specific information targetted by the task to transmit a clear message so they move towards more interactional exchanges as a compensatory strategy which will provide them with the possibility to keep the conversation going around a more general face-saving version.

The following examples are illustrative of situations in which both strategic possibilities are at work. In the first case the participant is less competent with language, but in spite of this she resorts to the more transactional use to cope with the task.

MUJGAN: .it's u-seful..but ..I don't know now ...
>>eeh.. I would like to say..car...coversh...uuuh.. it's very u-se-ful for every car because ..eeh .. it's eeh...eeh it's keepin' dry your car... and...eeh..it's easy take..take off. and eeh...(1.5) you you can use... everytime ... because ..eeh(1.0) .. it's nylon... it's...eeh...extremely light...and easy... to put on the.. bag ...and (3.0)... I think it's very useful f-for your car. **<6+>**

s/t: (thirty six seconds)

I: do you think...it's more useful in Turkey..

M: >> yes, I think so...it's useful in Turkey.yes, because...eeh
eeh...in Turkey...has got a bigger city...and...eeh.big share of pile of...ash and...it's...eeh important...the the car...very quickly...dirty. **<4*>**
s/t: (thirteen seconds)

==========

The participant uses six clauses to deal with the task transactionally. And in the second turn, when being asked about the practicality of the choice in her own country, she intervenes more interactionally.

The second participant did not bother with the detailed information about the car cover and decided to do some social chat about the item chosen.

==========

JOSE: well..uh..here is..uh..four.. different things..
uuhhh for Christmas..I think I'm going to-o buy..this hmm car-cover..I I think I'm going to give this to my brother because../M:to your brother?/ yeah..he got a car..and..he have a car ***(1.0)****..uh..he's in barcelona.. /M:hmm/ and in barcelona..the the weather is quite* ***(1.0)****..uh..wet /M: wet/..and because..the.. the sea..he he live.. in the seaside..and there is ..is too easy to-oo..****(1.0)*** *is too easy to-oo get the car..to get uh rust..*

(1u/8cl) <5*><3+>

==========

The examples also illustrate the coding system for transactional and interactional clauses. A 'starred sign ' (*) has been used to mark utterances which reflect "interactional use" and a 'plus sign' (+) has been used to mark "transactional use".

If the values related to subordinate clauses in the complexity measure are contrasted with the values of transactional clauses, this should provide some reference regarding the amount of language used which is directly pertinent to the task.

The specific analysis of the performance of subjects regarding the use of transactional information when coping with the tasks will provide another important perspective about language skills. It is in the interaction of factors such as c-units/number of clauses with transactional/interactional scores that we will obtain a result of the utterances which were strictly related with "conceptual language around the task" as opposed to " social language around the task".

Assessing Task-Implementation Conditions for this Research

Two major factors have been taken into consideration in this research for the implementation of tasks as effective tools: a) the learner's activation of language processing mechanisms and b) his/her engagement in effective communicative situations. Although tasks need to be close to real-life situations, when learners engage in them, meaning takes priority over form. The situation becomes worse when the learner is under processing pressure. Two major problems derive from this pedagogical scenario. Problem number one results from the fact that since form is displaced from focus, the learner must regularly re-focus form and achieve systematic use for language development to occur. Problem number two relates to the fact that pedagogical manipulation of processing conditions to maximize appropriate concentration on form cannot be easily put into practice without the risk of making tasks unnatural. Previous task-based research suggest that good tasks should have an appropriate level of difficulty, and be balanced in their aim to produce, fluent accurate and complex language (Long, 1989; Hultstijn, 1990; Swain, 1995; Skehan,1998).

Task-types contain some contrasts which are linked to different forms of effectiveness. The first criteria for selecting different task-types for this research was "rhetorical". On the basis of three clearly different discourse modes such as describing, narrating, and problem-solving, the intention was to measure learners' performance as they coped with communication problems

involving differential discourse requirements. The major aim was to assess whether there existed some sort of common core *strategies*, used by learners in *a systematic way* for overcoming communication problems.

Skehan (1998) has proposed an interesting set of five task characteristics which might impinge upon the nature of performance. These characteristics are basically ***(a) familiarity of information*** : participants are required a basic amount of relevant information which is well-known to them. This condition makes it easier for the learner to complete the task requirements ;
(b) discursive style: if participants are expected to engage in more alternate interactions due to the type of turn-taking imposed by the nature of the task, the task will be more ***dialogic***. If the discourse style imposes more extended turns and less interaction (such as narrations do) it will be more ***monologic***. Decision-making tasks are on the whole more dialogic in character ; ***(c) degree of structural clarity :*** tasks with a clear underlying structure lend themselves better for good performance, time sequencing and a clear relationship between task stages; ***(d) degree of complexity of outcomes :*** some tasks have simpler and more straightforward answers; other tasks require a more detailed analysis during performance and involve several possible outcomes together with other partner's contributions or only one possible solution but which is the result of a convergent negotiation. In this sense tasks can participate of mixed characteristics; ***(e) required degree of transformation*** : some tasks do not require participants to operate upon the information provided by the task , but only to interpret it for reproduction purposes. Description tasks in general require almost no transformation. The major ingredient of the task is based on the clear transmission of the learner's understanding of the item chosen. Other tasks require some degree of on-line transformation of the provided information and demand a change of state within the relationship of the elements of the task. Such is the case of some narratives which derive into a more or less complex narrative structure depending on character, activity and circumstance. But possibly the major difficulty in the proposed task-types is related to problem-solving tasks which require the added ingredient of having to provide

spontaneous answers related to the observation of details and the application of deduction and logical thinking .

The following table presents an assessment of the characteristics of the three tasks-types implemented for this research within Skehan's proposal.

	Descriptions	*Narrations*	*Problem-solving*
Potential amount of familiar information provided	quite reasonable	reasonable	limited
Discursive style	less monologic	more monologic	dialogic
Structural clarity	around 70%	around 100%	around 30%
Type of outcomes	relatively simple	relatively complex	complex
Transformation	some	more	perceptibly more

Table 5.2 Research task characteristics and contrasts for assessment of task difficulty

TRANSCRIPTIONS

Twelve three-hour videos resulted from the three stages of interviews, and 100% of the material was transcribed. The video sound was first transferred into a cassette which served as the source for the transcription. The whole transcription was double checked later with the video version to solve doubts, and increase information about verbalizations which were unclear but could become more transparent with the help of gestural aspects.

There seems to be a serious limitation in general concerning transcription conventions. For simplification purposes almost all studies have agreed on the simple typographic transcriptions without resorting to very many sophisticated notations.

Pausal Phenomena:

Researchers who have investigated pausal phenomena in native speech (Butterworth,1975 ; Chafe,1980 ; Levelt 1989) claim that the distribution of

pausing and speaking in speech reflects an alternation between phases in which hesitant speech is due to attentional concern with macroplanning, whereas stretches of fluent speech with little pausing reflect skilled microplanning that does not require much attention. In this sense there seems to be production cycles with newly organized speech, where pausal phenomena is more likely to occur, together with old better-organized speech with fluent stretches , containing ready - made language. The Kassel group (Dechert,1980 ;Dechert and Raupach ,1987) who have applied a similar research design to studies with second language learners, report that one major difference between fluent and non-fluent learners is that non-fluent learner's pauses, false starts and other types of hesitation reflect the need to focus attention on the lower levels of planning, whereas fluent learners act more like native speakers in exhibiting hesitation primarily as a reflection of integration and macroplanning.

Measurement procedures

Pauses were timed with a stop-watch. The procedure used was to consider as a pause, any break of 1.0 second or longer, either within a turn or between turns. This was indicated with parentheses throughout the transcription of all the data pertinent to specific task and time. Dotted lines were used to mark pausal phenomena.

The use of dotted lines where pausal phenomena occurs is also somehow standardized, although some very specific studies on pausal phenomena utilize standard brackets with the indication of the pause time whenever hesitations occur. This work contains the simple typographic transcription of speech with the indication of pausing time and dots to mark the pausing environment .

Performance features: Attention to specific performance features such as false starts, repetitions, and reformulations has been particularly important. These measures are used as the dependent variables which are operationalised in relation to fluency, and also serve as a possible indicator of

strategy choice during production. To that effect, whenever any of these features actually appear , either as repetitive syllables, words or phrases, they are maintained in the originally elicited version without being edited in the data transcription. This procedure is recommended for the sake of a qualitative version of the sample.

Mispronunciations and omissions: On similar grounds, all mispronunciations or omissions of forms are also reflected in the transcribed data since this proves particularly helpful for sorting out a possible source for errors and misunderstandings.

IMPLEMENTING AND SELECTING TASKS FOR THIS RESEARCH

The tasks chosen for this research are discourse-engaged. This allows for the possibility to look at speech in the broader context of discourse-structure. The approach provides an interesting alternative to more traditional discourse research which analyzes learner language through the filter of taxonomies of discrete discourse functions. (Wolf,1986 ; Olshtain and Blum Kulka, 1985 ; Cohen, A. ,1986)

Three kinds of discourse modes were considered as elicitation tasks: (a) one involving **description**, (b) one involving **narration** and (c) one involving **problem-solving**. The criteria for selecting the tasks derive from specific conditions indicated in the literature to optimize language output. The three task-types comply with basic requirements suggested in current SLA research for adequate task implementation to assess learner performance (Pica *et al.*1993 ;Crookes ,1986 ; Skehan, 1996) such as :

1. that the task types be goal-oriented.
2. that they involve activities focused on meaning,
3. that they be centred on situations which are closer to real-life.
4. that the task achievement require different processing demands.

Each task is specifically directed towards ***achieving particular goals*** .

The *descriptive tasks* consist in choosing an item which is identified to the

interlocutor, providing an explanation of what it does, and justifying the reasons for the choice. The *narrative tasks* consist in narrating a story (provided by the researcher via photos) and explaining what happens from beginning to end. At the end of the narration the subjects comment on the outcome of the story. The *problem-solving tasks* present a challenge for the subjects in which they have to sort out certain 'oddities' contained in pictures which need to be spotted and explained. The problems vary in the source of the oddities. The first problem-solving task presents social oddities. The second is about anachronisms and the third problem requires the subject to observe two pictures : a painting, and a photo, both of which contain logical incongruities which are not easily spotted at first sight.

Particularly useful as a motivating factor for the learner's performance in the different tasks is ***the speaker's emotional response*** (Levelt, 1978). Some sort of "arousal" is expected to happen with the "novelty" factor to stimulate the learner and concentrate interest in the objects to be described ; there are curious and surprising situations involved in the narratives ; and the problems to be solved present interesting challenges. ***Information-processing varies across tasks***. This is a factor related to the functions of the different discourse modes and the different demands imposed by task variety. 'Demand' is directly related to the amount of processing required by a given task. Achievement in a given task will depend on high or low demands. All of which contributes to the speaker's response to the tasks.

The task choice was primarily influenced by the ***need to provide a very close-to-real-life replica*** of a negotiation situation. The tasks are believed to have provided an adequate atmosphere for a motivated interaction on the one hand and a more genuine commitment in the performance, on the other. The character of the negotiations might or might not influence performance simply in terms of the quantity and quality of the feedback provided to the performer.

Some tasks impose on learners ***the activation of certain skills required for effective processing***. At different points in time, tasks systematically demand either more word-level processing and/or discourse

processing. These demands reflect on the learner's strategic choices for more fluency vs. more accuracy or complexity. Certain tasks possibly trigger specific attention to language forms to overcome difficulties. This factor will depend on the contrast established by scores obtained for accuracy vs. fluency. In this particular aspect if some tasks reveal more accurate forms than others, certain claims could be made concerning the pedagogical value of those tasks, regarding potential facilitation for use and learning. The synchronic and diachronic character of this research provides a means to trace consistency in performance with regards to this issue. The claims will be confirmed or disproved as the interpretation of the performance scores concerning fluency accuracy and complexity reveal the paths through which learners move along from time one to time three.

All these task factors will be analysed in more detail in the specific chapters dealing with the three task-types together with the task analysis. Task results will reveal how these factors correlate, either positively or negatively in the learner's performance in terms of *fluency accuracy and complexity* .

Task Design and Piloting

Description Tasks

The selection of the items for the three description tasks was the result of extensive piloting with similar subjects from the International House, London, and John Adams Hall, Institute of Education, University of London. The items selected were those equally favoured by either male or female subjects and which elicited more extensive comments.

The idea was to repeat the task types three times to maintain the experiment within similar parameters but providing a different challenge at all points. This objective was most certainly achieved considering the amount of exchanges generated during the dyads and the interest shown by the subjects during the negotiations

An extremely important measure in connection with the central purpose of this research is that the task -design would not only trigger a genuine context

for negotiations but also provide the learner with opportunities for stretching his interlanguage resources to produce probably more accurate and also more complex language. The task design for descriptions was meant to allow participants to share information verbally in detailed fashion. The provision of specific details enhances concentration and helps learners to deal with 'information-gaps' to ensure purpose in the task performance. (Brown and Yule, 1983).

The three description tasks provide a very close-to-real-life replica of a negotiation situation. They are believed to provide sufficient motivation for interaction and help learners' activate the sort of communicative skills required for their interlanguage development.

Narration Tasks

After adequate piloting, it was decided that the best choice for implementing the narrative tasks was a completely non-verbal sequence of still pictures, containing nine photos, which provided the story framework. Cartoons, an alternative choice which has been widely used, seemed to lack the necessary realism provided by a clear set of pictures. At each stage the subjects were provided with a folder containing the picture-story, allowing them sufficient time to become acquainted with the whole narrative. This granted them the possibility for adequate planning and the chance to develop or access a relevant schematic plan. Subjects were aware of the fact that interruptions of any sort could occur for clarifications. Several exchanges resulted from this very important instruction, since interlocutors felt free to ask for expansions whenever appropriate. At the end of the exchanges the interlocutor was asked to re-tell the story as had been understood. In most cases where the first narrator believed that there was a digression from his/her version, further exchanges took place. By this procedure, two narrations of approximately similar length were obtained about the same story. The first one was an original interpretation of the story based on the visual stimulus, while the second one was a "comprehension-check version" resulting from the interlocutor's understanding of the story through the negotiation. At times two

and three of the data collection, the subjects initiating the narration were switched around to obtain alternative perspectives from the subjects as narrators and interlocutors .

The narrative tasks for this research were designed using Brown and Yule's framework (1983) in order to control the learner's performance along specific variables such as attention to the number of characters involved, location, locational shifts, event shifts and logical sequencing .
account of the events. Keeping some of these elements under control is basic to have a cohesive story and to accomplish the task in an efficient way.

Variation in the amount of explicit information included in an account can have an effect on how much information processing is required from the interlocutor to follow the narrative. The more relevant details included, the easier will be the task for reconstructing the story. Although there seems to be some conventional procedure in narrators on the whole of avoiding excessive detail (Tarone and Yule,1989). This issue is connected with the point made by Erlich, Avery and Yorio (1989) who distinguish among subjects performing tasks who prefer 'skeletonising', where the barest details are provided, to 'embroidering', where the information is expanded and embellished.

Problem solving tasks

Problem-solving activities have two things in common (Kahney,1986). First, they all specify **a goal** and secondly, **the solver** is not immediately able to achieve the goal. Whatever is done in order to achieve the goal is "problem-solving". An essential aspect of a problem-solving task is that clear and sufficient information is provided as to what needs to be done in order to solve the problem. People differ in the way they solve problems for a number of reasons. They differ in the amount of experience they have concerning the information required to solve the problem ; they employ different strategies in solving particular problems; and they also differ in the amount of attention they

pay to different aspects of the problem structure (Simon,1978). All of which has powerful determining effects on the ease with which a problem can be solved.

Analysing , analogising and planning

Three important aspects of problem solving activity are generally referred in the cognitive problem-solving literature (Kahney,1986) : means ends analysis, the establishment of analogies and planning.

Means-ends analysis is a very common problem solving method, useful in a large number of problem solving situations, including real-world situations. This sort of approach works through an analysis of the situation into goals and sub-goals by working out what moves (means) will allow the problem-solver attain the end goal. People also actively use old knowledge in trying to understand new events or problems, so they interpret new problems in terms of what they know already. The use of this strategy derived from the application of experience to problem solving is known as "analogical problem solving". Subjects can spend a long time thinking before deciding their moves (Thomas, 1974). In this way there is a typical planning-time involved before executing. The complexity of a problem can be measured in terms of different factors. One factor could be that the underlying structure of the problem is not transparent, or that the presentation of the elements of the problem have been manipulated on purpose (such as a tricky image) to avoid first glance solutions. An important factor which limits the amount of planning that can be accomplished is the processing-load imposed on the working memory.

Problem-solving tasks have been used in the past particularly to assess learner performance under different task-conditions. Problem-solving tasks such as 'Spot the difference' have been used in learner performance research by Long (1980) and Crookes and Rulon (1985). Interactants were given similar but slightly different pictures and asked to work together and come to a consensus about the differences found.

A different but typical example of a problem-solving task is the one used in Jones & von Bayer (1983 : 128). A guest at a hotel discovers early one morning that all his personal belongings are missing. The hotel staff is missing at early hours so the guest phones other guests he has met in the same hotel for help. The students must do some role-playing. They must figure out how to get assistance and solve the problem In this task , information is expected to flow two ways and converge to one outcome. The idea of convergence as an important characteristic of tasks derives from work by Duff (1986),who sustains that convergent tasks such as problem-solving will produce more negotiation than divergent ones, because of the vested interest or responsibility of both parties in the ultimate decision or solution to be reached.

Other decision-making tasks (in great abundance in textbooks for classroom use) also fit within the problem-solving framework. An example of this type of task is provided by Pica et al. (1993). Students are given information about six individuals requiring a heart transplant. Based on the information provided for the six potential receptors, students must work out together who will ultimately receive the transplant. A two-way exchange of information is expected among students.

Finally , decision-making tasks were used in two studies by Skehan and Foster (1996;1997). In the first study , students were supposed to agree on the appropriate sentence for five crimes. All crimes contained extenuating circumstances. In the second study students had to provide advice to different people asking for help to solve different problems as in the typical newspaper social column where readers ask for advice (several 'Agony Aunt' situations). While the first problem-solving type requires a relatively simple outcome, the second problem-solving type leads to more complex outcomes, in that no simple solutions to the problems are possible.

Different problem-solving tasks are likely to present varying degrees of opportunities to work towards comprehension and to provide opportunities for production. Some tasks will require more interaction than others (more two-way information than one-way information). It still remains to be seen whether

it is the tasks providing learners with the most opportunities for negotiation of input and modification of interlanguage that help learners in language development. Or whether better opportunities for language development result from the sort of task design which triggers for more cognitive processing, leads to 'noticing' and allows opportunities for recycling information. Tasks providing modulation of planning time for production also generate good opportunities for language development to happen. One of the major challenges of task-based research is to devote specific attention to the clarification of these issues.

TENTATIVE HYPOTHESES FOR VALIDATION IN THIS STUDY

Two sets of hypotheses have been generated within this research. One set is related to the task factor and the other to the time factor. *The task factor* is one of the major elements in this research study because different task types are likely to elicit different types of language and pose different types of communicative problems. Tasks can be made more complex by increasing their cognitive load and the constituent features of the tasks structure. This aspect related to the task structure is central in the choice of rhetorical variety for this study. *The time factor*, the second major element in this research proposal is strictly related to the opportunities signalled longitudinally over three points over nine months in time. These moments mark the circumstances in which interlanguage restructuring might be going on and possible changes might be taking place. The proposed indices of fluency, accuracy and complexity , as manifested in learner performance, are used as the empirical means to refer language processing and substantiate progress and potential language development.

The set of hypotheses will be formulated within the context of both task effects concerning fluency, accuracy, and complexity and the time factor.

Hypothesis One : ***There will be differential performance effects concerning the three tasks.*** This will happen as the result of implementing

different discourse modes (description, narration, problem-solving). The different discourse modes will place different demands upon the learner's language system. This will affect results in fluency, accuracy and complexity.

Hypothesis Two: ***Fluency is directly associated with the task type. Tasks which are lower in complexity will be associated with positive gains in fluency and vice versa.*** Fluency in this case will reflect the learners' capacity to cope with communication in real time. Fluency measures involve values related to repetitions, reformulations, replacements, false starts, pauses and silence.

Hypothesis Three : ***Task complexity will increase the focus on form which is also reflected on accuracy.*** The difficulties centered on contextual factors will push the learners to a higher number of reformulations and repairs in order to overcome a wider range of difficulties such as referential problems, propositional structuring and discourse cohesiveness. This issue is related to the way learners exploit their resources upon perception of pressing communicative demands.

Hypothesis Four : ***The more interactive tasks will generate more accuracy and complexity of language use.***

(a) There will be a differentiated change in the accuracy levels used over time.

(b) Complexity levels are also hypothesized to vary across types depending on whether the tasks require transformation of elements or more complex decision-making .

Hypothesis Five : ***The growth of capacity in language production will be reflected in the potential increase of transactional use of language.***
The increase of transactional language use over interactional language use will reflect improvement in the learner's competence over time.

Hypothesis Six : ***The increase of task complexity will force learners to produce better language resources for the sake of communicative quality, reflected in better fluency, complexity and accuracy.*** Task complexity allows to trace differential language use from a qualitative as well as from a quantitative perspective.

The picture of learner performance in the framework of these hypothetical proposals related to the task factor will allow the appraisal of differential task difficulty and variation in learner language use The time factor, which is directly concerned with language development in the same learners allows for the observation of progression in overcoming sources of difficulty. Quantifying the relation between fluency , accuracy and complexity measures for performance at given points in time provides empirical information concerning the individual changes in interlanguage production over time.

CHAPTER SIX

THE DATA ANALYSIS (1): DESCRIPTION TASKS

Four major objectives provide the focus of this study. The first objective concentrates, primarily, on interlanguage variability related to task types, with a focus on psycholinguistic variables, such as time-pressure, which affects performance. The second objective targets specific measures in terms of sustained fluent performance in real-time, the amount of error-free language used, and the capacity to generate more complex language. The third objective reflects learners' control over transactional information as a measure of effectiveness in coping with the tasks. Finally, the fourth objective provides a qualitative perspective of learners' strategic resources to deal with the tasks. The focus here is on the internal and cognitive aspect of communication in an attempt to categorize processing skills and to pinpoint definable patterns for the organisation of discourse structure.

The aim of the present chapter is to analyse the data collected for the *descriptive tasks* from a qualitative as well as a quantitative point of view. Chapters Seven and Eight will deal, accordingly, with the data on the *narrative* and the *problem-solving tasks*.

There seems to be no ready-made formula to characterise the way speakers cope with descriptions, but apparently people have some common ways to go about describing things. This is often achieved by naming objects, or paraphrasing what they are for, if there are no clear labels to refer to them. But the most typical approach while processing information about objects, is to concentrate on certain essential aspects

about devices which focuses on how they operate. This discourse framework associated with functions could trigger more language in relation to the physical aspects of objects. The following table, adapted from Brown and Yule (1983), provides the schematic framework and illustrates the sort of discourse structure present in most descriptions. It basically serves as a template to analyse what learners in the present research have accomplished with their individual task performance:

Description of the object	Means
a) Identification of the object	labelling paraphrasing characteristic properties
b) Special function of object	action/goal relationship
c) Evaluation of object	value judgement

Table 6.1 : Description Structure (Transactional Information)

The following three tasks were used to collect information about the way learners' process language to communicate descriptions :

Description Tasks :Time one

In the first task, the participants were instructed to pick a potential present near Christmas time from a buyers' guide catalogue. The task purpose was to trigger some personal involvement, a characteristic which has been claimed in the research literature on tasks (Crookes ,1986; Pica *et al.*1993; Skehan, 1996) to provide an easier-processing dimension. The task also provided an element of expectation, due to the peculiar characteristics of the items offered in the shopping catalogue as novelties. Typical choices were *an everlasting address book, a wrist band* for travel sickness, *an electronic key minder* to help the owner find his keys, *a device to entourage babies back to sleep* , a practical *car cover*, *a sentry light* to

deter intruders, and a *DIY sensor for hidden wires and pipes.* (Appendix Time One: Description).

The learner had to direct his/her attention to particular aspects of the object description to extract the meaning related to the "special" characteristics of the products so that a specific choice could be justified. Visual support was provided by the advertising page (Cf. See appendix section) with coloured photos and classical advertising jargon to make the product attractive. Specific concentration on the language forms of the advert to explain objects was required from learners to support their choice. Decision-making in terms of the utility potential of the product depends heavily on adequate language processing. It is this sort of information which the learner has to provide in his/her performance to justify selecting or rejecting an object. The degree of complexity of the task depends both on the characteristics of the object chosen by the speaker, and the degree of conceptual difficulty entailed in its functions. The learners' performance provides a characterization of his lexical resources and their ability to provide the information within a cohesive discourse framework.

Description Tasks :Time Two

The objects introduced for Description Time Two were similar to the ones introduced in Time One with only slight changes concerning the purpose of the choice. The task-sheet presented four illustrations of the objects available, with coloured photos from the catalogue in which they were advertised. Among the candidates for choice were : an *inflatable bed* for compact storage to receive unexpected guests , *a tiny personal organiser* to keep track of confidential information such as addresses, telephone numbers and appointments, and a full-function calculator ; *a pyramid-shaped ioniser* to keep rooms ventilated ; and *a high pressure hose* to clean cars and patios. Another range of objects included : *a cordless telephone amplifier* which allowed speakers to talk hands-free, and other people in the room to participate in the conversation ; *a battery-*

operated hand to serve drinks across the bar ; *a glass sphere with rare gases* which reacted to electronic impulses with the touch of the hand ; and *a car anti-theft device* which blocked ignition unless the right code was provided. (Cf Appendix –Description Time Two)

Basically maintaining the same description structure, the subjects had to choose objects, again from an advertising catalogue, based on two types of criteria : one "useful" and one which was "not useful" around the house. This aspect of the task design was meant to make the subjects concentrate on salient characteristics of the objects. The attention of the learner was directed to lead them to organise the information towards the positive or negative aspects of the object in a goal-oriented manner. This was intended to provide a sharper focus for the task.

Description Tasks: Time Three

Description Time Three continued the theme of requiring personalised choice, but in this case required from the subjects specific reference to the health effects provided by a set of objects. For example, there was a backless chair, which is a more personal-type of furniture to be used preferably at home rather than at an office. There was a sonic pest-repeller which would not be very effective for certain people who would prefer to exterminate vermin rather than just keeping them at bay. (Cf. Appendix - Description Time Three)

The difficulty involved in this type of task framework, which is very similar to the two previous description tasks, forces participants to concentrate on the technical complexity associated with the function of the object. The factor which most probably determines the quality of the description is related to the number of functions involved. The more functions in the object , the more complex the task.

Expectations and Predictions of Performance

The description tasks were designed to repeat similar demands over the three occasions. Each version of the description task was intended to bring about active negotiation for meaning and clarifications which require further explanation (Pica *et al.*, 1993). The expectations were motivated by the nature of the task itself. The objects available are not typical of most shopping catalogues. The peculiarity or original function of each item makes it necessary for the speaker to considerably extend his explanatory resources. This condition should generate frequent exchanges between subjects and also concentrate the learners' attention to form and make them notice it (Schmidt,1990; Van Patten ,1996.)

The three description tasks provide naturalness to the negotiation situations and are believed to provide sufficient motivation for the kind of interaction required for learners to activate effective communicative skills These circumstances could generate the sort of performance required for interlanguage development.

In the following section, there will be a first look at the statistical information which allows some observations to be made concerning values of typicality as well as generalisations derived from group performance.

Quantitative Data :The effects of time

Complexity and Accuracy

This section focuses on learners' performance regarding accuracy, complexity and fluency, to assess the degree of correctness , the quality of language used and the capacity to sustain discourse without disruption. The use of transactional/interactional language intends to reflect the learner's ability to cope with the task requirements of describing , narrating or solving problems without avoiding the basic task demands.

In table 6.2 the complexity scores for the individual participants at the three data collection points are shown, together with the number of clauses generated by individual subjects. The complexity score is derived by dividing the number of clauses by the number of c-units (Foster & Skehan 1996). The mean scores show that the complexity score increases over the three time period, from 3.14, to 3.38, to 3.67. A one-way analysis of variance shows that the increase registered at the complexity level becomes significant over time. Group level performance demonstrates that twelve of the sixteen subjects have increased in complexity over time with particularly high values in four cases, reasonable values in five cases and minor positive values in three cases. Mean scores are provided at the bottom line of Table 6.2.

Individual learner performance generally shows fairly linear improvement, as in the cases of Cecille, María, Giovanna and José, with scores ranging between 46% and 91% gain. These scores contrast with the reductions experienced by Marcela, Mauro, Rosa and Elana who have produced a range from -7% to -37% loss in their complexity from Time One to Time Three. In the middle of these two extreme distributions we have the cases of Ozgul ,Johann, Daniel and Charo who have increased their complexity ranging from 26% to 21%. In the lower end there are the cases of Mujgan (3,6%) Inalda (4,2%) and Elif (5.5%) closing the gain range.

COMPLEXITY SCORES : DESCRIPTIONS 1, 2 , & 3

		COMPLEXITY						SCORES			
	Subject Id	C-Units			Nº Clauses			Clauses per C-Unit			Gain
		T1	T2	T3	T1	T2	T3	T1	T2	T3	%
1	**Giovanna**	14	20	23	29	52	70	**2,07**	**2,60**	**3,04**	**46.86**
2	Elif	12	12	14	22	28	27	**1,83**	***2,33***	**1,93**	**5.46**
3	**Charo**	13	15	8	45	55	35	**3,46**	**3,67**	**4,38**	**26.58**
4	Mujgan	7	13	16	27	33	64	**3,86**	**2,54**	**4,00**	**3.63**
5	Serico	21	22	18	45	59	46	**2,14**	***2,68***	**2,56**	**19.63**
6	***Marcela***	15	20	17	44	35	39	**2,93**	**1,75**	**2,29**	***-21.84***
7	**Johann**	14	13	12	46	38	47	**3,29**	**2,92**	**3,92**	**22.19**
8	Daniel	10	11	13	22	28	36	**2,20**	**2,55**	**2,77**	**25.90**
9	**Cecille**	22	11	16	69	38	81	**3,14**	**3,45**	**5,06**	**61.14**
10	**Maria**	13	12	9	40	47	53	**3,08**	**3,92**	**5,89**	**91.23**
11	***Mauro***	9	9	15	38	38	38	**4,00**	***4,22***	**2,53**	***-36.75***
12	**José**	13	12	4	51	45	27	**3,92**	**3,75**	**6,75**	**72.19**
13	Inalda	10	5	9	33	30	31	**3,30**	***6,00***	**3,44**	**4.24**
14	**Ozgul**	6	5	9	23	26	42	**3,83**	***5,20***	**4,67**	**21.93**
15	***Rosa***	10	14	23	24	47	51	**2,40**	***3,36***	**2,22**	**-7.5**
16	***Elana***	17	21	18	80	66	58	**4,71**	**3,14**	**3,22**	***-31.63***
	MeanScores	**12,88**	**13,44**	**14,00**	**39.75**	**41,56**	**46,56**	**3,14**	**3,38**	**3,67**	**16.87**

Table 6.2 : Complexity Scores for Description Tasks over time

Parallel to this trend in complexity there seems to be a tendency for accuracy to increase over time as seen in the accuracy ratios presented in Table 6.3 below. The accuracy ratio is obtained by dividing the proportion of error-free clauses by the total number of clauses produced, following Foster & Skehan (1996).

Some participants seem to have improved in the area of complexity at the expense of improvement in accuracy. This situation relates selectively to the corroboration that although some trade-off effects seem to operate quite strongly, there also seems to be an interesting interrelation between complexity and accuracy with positive parallel effects over time.

The mean scores for accuracy present a less consistent picture, with an increase from Time 1 to Time 3, but a reduction at Time 2. This sort of variation implying reduction at the second stage of the sample can be a normal possible effect of restructuring of competence levels over time.

ACCURACY SCORES : DESCRIPTIONS 1, 2, & 3

	Subjects	Total Nº Clauses			Error-Free Cls			Accuracy Ratios			%
		T1	T2	T3	T1	T2	T3	T1	T2	T3	Gain
1	Giovanna	29	52	70	21	43	61	72,4	82,7	87,1	20.3
2	Elif	22	28	27	15	21	25	68,2	75,0	92,6	35.8
3	Charo	45	55	35	38	40	26	*84,4*	*72,7*	*74,3*	*-11.9*
4	Mujgan	27	33	64	15	26	44	55,6	78,8	68,8	23.7
5	Serico	45	59	46	31	38	40	68,9	64,4	87,0	26.3
6	Marcela	44	35	39	24	14	24	54,5	40,0	61,5	12.8
7	Johann	46	*38*	47	37	26	41	80,4	68,4	87,2	8.5
8	*Daniel*	22	28	36	15	15	19	68,2	53,6	52,8	-22.5
9	*Cecille*	69	*38*	81	56	30	64	*81,2*	*78,9*	*79,0*	-2.7
10	*Maria*	40	47	53	36	44	45	*90,0*	*93,6*	*84,9*	-5.7
11	Mauro	36	38	38	31	33	35	86,1	86,8	92,1	6.9
12	*José*	51	*45*	27	39	38	18	76,5	84,4	66,7	*-12.8*
13	Inalda	33	30	31	27	22	27	81,8	73,3	87,1	6.4
14	Ozgul	23	26	42	17	16	31	*73,9*	*61,5*	*73,8*	*-0.1*
15	*Rosa*	24	47	51	22	47	42	*91,7*	*100*	*82,4*	*-10.1*
16	Elana	80	*66*	58	74	61	55	92,5	92,4	94,8	2.5
	MeanScores	39.75	41,56	46,56	31.13	32,13	37,31	76,64	75,42	79,50	**3,73**

Table 6.3 : Accuracy Scores for Description Tasks over time

A one-way ANOVA indicates that these mean scores are not significantly different from one another. At an individual level, there are seven cases in which the percentage of accuracy has been reduced. This reduction ranges between -0.1 and -22.5 %. The interesting contrast which may be established with these results is that some subjects like Cecille, María and José who had the highest scores in complexity are among the seven cases which present a reduction of accuracy in their performance. Giovanna, who had the fourth highest score was the exception. At the opposite end, Mauro and Elana who presented the highest reduction in complexity over time, reached the highest levels of accuracy of the whole group at Time Three. In a similar fashion, Charo, Daniel and Ozgul who had gained reasonable complexity scores present a reduction in their accuracy over time.

It could be generalised that learners make choices towards control over those areas of performance they want to improve or feel more inclined to support in their development as language users. Complexity and accuracy

reflect two significant ways of focusing on form with a difference in emphasis. The first is more likely to reflect risk-taking attitudes, while the second reveals the more conservative attitude on the learner interested in producing target-like forms (Skehan & Foster 2001). Although there is a typical trade-off effect resulting from the development of the group in their performance in these two extremely important indices, the statistical results for the group indicate a positive increase of subordination scores together with a positive increase in accuracy results in twelve cases.

Transactional and Interactional Scores

The next point of the analysis concentrates on the contrastive data obtained from the use of transactional language, which in the context of this study deals with the core information needed to accomplish the task as opposed to interactional language use which involves information which is more peripheral to task completion, although important for interpersonal dynamics. Each of these is indexed by the ratio of the clause type (transactional or interactional) to the total number of clauses.

The general trend is towards an increase in the proportion of total clauses which are transactional, as can be seen in Table 6.4 below. The average transactional proportion increases from 57%, to 60%, to 66%. Two subjects, Daniel and Johann, produce strikingly high values. The first subject increased from an 18.2% ratio at Time One to a 61.1 ratio at Time Three, which is equivalent to an increase of 235.7% over time. The next high values within a continuous range among other subjects in the group (Jose, Giovanna, Charo, Inalda and Rosa) are also supportive of the interpretation that some particularly interesting progress has been made within the group in the use of more core information over time while transacting description tasks. Since interactional scores have a reciprocal relationship with transactional scores, it is inevitable that they are correspondingly reduced over the three time periods.

TRANSACTIONAL INTERACTIONAL SCORES : Descriptions 1, 2 & 3

		Total Clauses			TRANSACT Cls			N°Cls/Tran Ratios			INTERACT Cls.			N°Cls/Inter Ratios		
		T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
1	Giovanna	29	52	70	16	27	51	55,2	51,9	72,9	13	25	19	44,8	48,1	27,1
2	Elif	22	28	27	16	20	18	72,7	71,4	66,7	6	8	9	27,3	28,6	33,3
3	Charo	45	55	35	28	35	30	62,2	63,6	85,7	17	20	5	37,8	36,4	14,3
4	Mujgan	27	33	64	16	17	42	59,3	51,5	65,6	11	16	22	40,7	48,5	34,4
5	Serico	45	59	46	25	30	24	55,6	50,8	52,2	20	29	22	44,4	49,2	47,8
6	Marcela	44	35	39	29	26	21	65,9	74,3	53,8	15	9	18	34,1	25,7	46,2
7	Johann	46	38	47	16	21	26	34,8	55,3	**55,3	30	17	21	65,2	44,7	44,7
8	Daniel	22	28	36	4	14	22	18,2	50,0	**61,1	18	14	14	81,8	50,0	38,9
9	Cecille	69	38	81	37	26	44	53,6	68,4	54,3	32	12	37	46,4	31,6	45,7
10	Maria	40	47	53	31	27	29	77,5	57,4	54,7	9	20	24	22,5	42,6	45,3
11	Mauro	36	38	38	20	17	23	55,6	44,7	60,5	16	21	15	44,4	55,3	39,5
12	José	51	45	27	23	20	23	45,1	44,4	85,2	28	25	4	54,9	55,6	14,8
13	Inalda	33	30	31	24	17	26	72,7	56,7	83,9	9	13	5	27,3	43,3	16,1
14	Ozgul	23	26	42	16	18	29	69,6	69,2	69,0	7	8	13	30,4	30,8	31,0
15	Rosa	24	47	51	15	33	36	62,5	70,2	70,6	9	14	15	37,5	29,8	29,4
16	Elana	80	66	58	44	47	36	55,0	71,2	62,1	36	19	22	45,0	28,8	37,9
MEANS		12,88	41,56	46,56	22,50	24,69	30,00	57,21	59,45	65,85	17,25	16,88	16,56	42,79	40,55	34,15

Table 6.4 : Transactional and Interactional Scores for Description Tasks over time

It is now relevant to explore the inter-relationship between the scores for accuracy, complexity, and transactional/interactional use. The relevant data are shown in Table 6.5.

An interesting equation could be established here between complexity and transactional language use. Nine of the cases which have revealed progression in complexity also have established some progression in the use of transactional language. This progression is also valid for accuracy in ten out sixteen cases.

If complexity, within this construct, reflects the willingness of subjects to use a greater variety of syntactic forms, while accuracy represents the tendency to use more precise language forms, an increase in transactional language use would reveal the learners' efforts to using more pertinent information to reach the main communicative objective of the tasks.

Statistics for Description Tasks Overtime

		Complexity Scores			Accuracy Ratios			Transactional Ratios			Interactional Ratios		
		T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
1	Giovanna	2,07	2,60	3,04	72,4	82,7	87,1	55,2	51,9	72,9	44,8	48,1	27,1
2	Elif	1,83	2,33	1,93	68,2	75,0	92,6	72,7	71,4	66,7	27,3	28,6	33,3
3	Charo	3,46	3,67	4,38	84,4	72,7	74,3	62,2	63,6	85,7	37,8	36,4	14,3
4	Mujgan	3,86	2,54	4,00	55,6	78,8	68,8	59,3	51,5	65,6	40,7	48,5	34,4
5	Serico	2,14	2,68	2,56	68,9	64,4	87,0	55,6	50,8	52,2	44,4	49,2	47,8
6	Marcela	2,93	1,75	2,29	54,5	40,0	61,5	65,9	74,3	53,8	34,1	25,7	46,2
7	Johann	3,29	2,92	3,92	80,4	68,4	87,2	34,8	55,3	55,3	65,2	44,7	44,7
8	Daniel	2,20	2,55	2,77	68,2	53,6	52,8	18,2	50,0	61,1	81,8	50,0	38,9
9	Cecille	3,14	3,45	5,06	81,2	78,9	79,0	53,6	68,4	54,3	46,4	31,6	45,7
10	Maria	3,08	3,92	5,89	90,0	93,6	84,9	77,5	57,4	54,7	22,5	42,6	45,3
11	Mauro	4,00	4,22	2,53	86,1	86,8	92,1	55,6	44,7	60,5	44,4	55,3	39,5
12	José	3,92	3,75	6,75	76,5	84,4	66,7	45,1	44,4	85,2	54,9	55,6	14,8
13	Inalda	3,30	6,00	3,44	81,8	73,3	87,1	72,7	56,7	83,9	27,3	43,3	16,1
14	Ozgul	3,83	5,20	4,67	73,9	61,5	73,8	69,6	69,2	69,0	30,4	30,8	31,0
15	Rosa	2,40	3,36	2,22	91,7	100	82,4	62,5	70,2	70,6	37,5	29,8	29,4
16	Elana	4,71	3,14	3,22	92,5	92,4	94,8	55,0	71,2	62,1	45,0	28,8	37,9
MEANS		3,14	3,38	3,67	76,64	75,42	79,50	57,21	59,45	65,85	42,79	40,55	34,15

Table 6.5: Contrastive Values for Complexity,Accuracy and Transactional / Interactional Scores

FLUENCY

Finally we need to concentrate on the performance results obtained with fluency. The relevant mean scores are shown in Table 6.6 and the detailed individual scores in Table 6.7. An interestingly mixed picture emerges from the mean scores. The number of pauses and pause length decrease monotonically over the three time periods, while the numbers of false starts and reformulations increase. There is a complex move towards an increase for the replacement measures and to a decrease for repetition, but with each measure the value for Time 3 is closer to Time 1 than is that for Time 2.

	Nº Pauses	Pause Length	Replacement	False Starts	Reformulation	Repetitions
T1	8.38	12.56	1.25	.63	9.06	3.69
T2	8.19	11.31	1.63	1.13	9.31	2.56
T3	7.81	7.81	1.44	1.56	11.44	2.63

Table 6.5 Total Fluency Scores for Description 1, 2 & 3

From the perspective of individual subjects, the number of pauses is reduced over time in seven cases, it remains constant in three cases and increases in six cases. Pausing time increases only in five cases , remains constant in five and decreases in six cases.

THE STATISTICS OF OVERALL FLUENCY OVER TIME

DESCRIPTION	FLUENCY 1 -2 & 3																	
	NºPauses			Pausing ss			Replace			False Starts			Reforms			Repets		
Subject Ident	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
Giovanna	7	12	5	7	16	7	0	3	3	0	2	1	1	5	14	1	2	6
Elif	17	4	3	24	4	8	0	0	0	1	1	0	8	4	5	4	4	3
Charo	12	5	2	19	7	3	0	1	0	0	1	1	10	13	8	3	3	1
Mujgan	8	4	10	18	11	16	0	0	1	1	1	1	7	8	16	2	2	4
Serico	5	8	16	8	12	19	1	1	0	0	0	1	7	11	11	1	5	2
Marcela	7	7	5	17	14	11	1	0	1	2	0	2	21	12	12	2	1	2
Johann	10	12	16	15	20	28	1	3	3	2	1	1	4	4	10	2	0	1
Daniel	10	14	10	18	18	24	1	3	2	1	1	2	9	9	12	0	0	2
Cecille	7	9	9	9	12	9	4	4	1	1	0	3	11	9	14	9	3	5
Maria	5	4	7	5	4	7	1	3	1	0	3	2	7	20	17	4	3	4
Mauro	7	8	5	10	11	8	2	2	1	0	0	1	12	9	12	3	1	2
José	13	12	13	16	14	16	4	3	2	0	3	0	19	13	6	3	2	4
Inalda	7	10	5	8	13	12	2	1	1	0	0	0	8	6	7	6	4	1
Ozgul	4	8	9	9	11	18	0	0	2	0	1	3	4	1	11	4	0	1
Rosa	4	5	4	5	5	5	0	0	4	1	4	4	7	11	12	7	3	1
Elana	11	9	6	13	9	6	3	2	1	1	0	3	10	14	16	8	6	3

Table 6.6 Individual Fluency Scores for Description 1, 2 & 3

In a general analysis, targeting group performance as a whole, we can see that the number of pauses tend to decrease over time. Interestingly enough the length of pauses seem to be considerably reduced as well from T1 to T3. The scores for replacement and repetitions are on the lower end and in these factors there seems to be no significant trends over time.

False starts, on the other hand, tend to increase from T1 to T3. This might reflect a tendency for self-correction aiming at more accuracy. Similarly there seems to be an interesting trend with regards to reformulations which is consistent with the trend of false starts.

The most interesting value in Tables 6.6 and 6.7 is in reformulations which presents a significant increase over time in ten subjects. Learners appear to reformulate more with time, a circumstance which is consistent with the hypothesis that as learners reformulate more they approximate to more accurate language forms. The fact that there are fewer false starts, on the whole, in most subjects and that the number of pauses together with pausing time seems to decrease reveal a positive trend towards the improvement of fluency.

Summarizing from the learners' performance scores characterized in this quantitative analysis, the following generalisations could be made:

a) The most important change that can be traced from Description Time One to Description Time Three is the increase in the amount and quality of interlanguage that has been produced in some subjects.

b) Complexity seems to improve selectively at the expense of accuracy, although there also seems to be an interesting interrelation for some positive parallel effects over time. Trade-off effects might appear more clearly in the context of task difficulty, which in this design is manifested in the presence of more or less transactional language use.

c) Achievement of communicative goals seems to be generalised across the group as a whole and there are specific cases evidencing the kind of progress required for a "*better balance*" in terms of fluency , accuracy and complexity together with implications for transactional language use over time.

A QUALITATIVE PERSPECTIVE OF PERFORMANCE

Although measures such as complexity and accuracy tend, within this interpretive context, to enter in competition with one another, in the sense that greater accuracy may well be achieved at the expense of greater

complexity and viceversa (Skehan and Foster , in press), it could also be established that these areas interrelate in the light of other important indices such as transactional language use, task demands and the learners' strategic resources. A closer analysis of these interrelations calls for a qualitative interpretation of the data.

Language Use: Handling Descriptive Structure

This section of the data analysis will make a qualitative assessment of the use of transactional vs.interactional language, the cognitive demands of the tasks, the learners' differing focus on form vs. meaning during performance, and the learners' strategic resources to deal with discursive problems. Important generalisations arise concerning learner's paths towards potential development.

Transactional vs Interactional Language

The progressively high transactional values generated by learners in this research may establish an interesting connection with the research hypothesis that the use of more core information over time while transacting description tasks correlates with successful performance. Transactional scores are also particularly pertinent within this research design to illustrate a progression from the group towards more achievement strategies to reach communicative goals.

Transactional language is centred in the transferring of information (Brown & Yule,1983). Transactional information is "pragmatically marked" because it relates to finding out information, passing on knowledge or jointly participating in the solution of problems.

Talking for the sake of talking, "having a chat" over coffee or a meal, is a more informal type of interaction which has been labelled by discourse analysts as interactional language or "casual conversation". According to Eggins and Slade (1997), such exchanges are instrumentalised as a means

of constructing a social reality related to a sense of social identity, membership or cultural affiliation.

The Transactional Factor : Sucesses and Failures

Learners achieve transactional information by focusing on ideational meanings. This implies that the learner must access an information framework for his description which basically refers to: (a) the particular characteristics of the object for the sake of its identification ; (b) the specific function of the object which implies an adequate understanding of the action /goal relationship established for its use; and (c) a value judgement concerning the practicality of the object. (Cf. the previous section on the necessary information for descriptive tasks.)

These general principles can be made more specific, and in ways which will be illustrated through some concrete examples from the actual data below. Firstly, the learner provides some referential form concerning the object which is meaningful for the interlocutor. This is usually achieved by some sort of "*labelling*" which reflects the learner's cognitive operation on the item being described. If he cannot retrieve an adequate term from working memory or a hyperonym to help the interlocutor identify the object, other strategic resources such as *paraphrasing* are used. Together with this basic identification process some learners expand their message in relation to complementary information such as shape, size, material, and colour. But these aspects are enhanced regarding their informative value. Secondly the learner develops descriptive discourse within a simple problem-solution pattern, which recycles the information obtained from the catalogue into a manageable communicative form. This second development, which relates to discursive strategies, will be dealt here only superficially to illustrate how it reinforces the conceptual aspect of communication. The same issue will be discussed in more depth at the end of the chapter within the section related to the use of strategies.

Learners' orientations towards language performance on the whole may be constrained by specific interrelated factors: their abilities to access their internal processing system, the nature of the tasks they have to face, and their particular strategic resources to circumvent communication problems. The qualitative analysis in this section is learner-centred in approach and intends to capture the learners' efforts in an attempt to characterise their information-processing styles. The illustrations of individual learners' performance target aspects such as recognition of information, mode of reasoning , organization of information and ability to cope. The analysis is structured around these sensitive aspects of language abilities and the associations made by learners with problem-solving which is at the centre of task-based methodology.

Learners' strategic paths

Conveying ideational meanings: The following examples illustrate how some of these strategic steps are carried out. Initially, the information is organised on the basis of physical features, which are combined with function, as in the description of this special address book.

Excerpt 6.1: Physical features and functional advantage (Stage 1)

a) *G ::it's small ...is.. made..eh..in leather..(E: yes) an-ddd.*
I can..eh ...write down..my date..appointment (identification / function)

The first clause, referring to "smallness", establishes a semantic association with the practical aspect of saving space (something you can carry in a handbag or pocket). The fact that "it is made of leather" is connected with durability (everlasting) and quality (aesthetic value). The remaining part of the description specifies the utility of the object.

b) *"I think its useful because eh. . .thee ..sheet.inside are made in plastik*
E: uhumm
G : so. I can eeh takeh er take off my writings. (evaluation/function)
when I use it and it can last.(0.5) for ever

An interesting strategic resource results from combining the fact that the pages are made of plastic, so the written information can be "erased" when

no longer necessary. There is a reinforcement of meaning-relation with the use of the clause "it can last forever".

Other learners organize the ideational information by analogising the organisational procedures used by the shopping catalogue to identify the object. Another learner introduces the item by using very similar terms: "an everlasting address book." The description is accompanied by a clear attempt to simplify the lexical and syntactic information for her interlocutor.

c) **CH.**:>>well I've chosen two very different things
one of them is.. an everlasting address book
this book is for..eeh (1.0) ..to add..eeh telephone numbers .addresses from people.. (identification/function)

The problem-solution structure: The rest of the discourse is modeled within the discourse frame of the problem-solution structure. The situation is analysed first in practical terms,

Excerpt 6.2 : Description within the problem-solution structure framework (Stage 1)

a) "and the problem is...everyday...you have
to write a new one..and *after five years the whole book is completed then you have to buy another one*...and
it's..always perhaps a problem "

and then in aesthetic terms ,

b) "eeh..*they look very ugly...because when...someone has disappeared* ..and may be..is..finally dead...at that
time... then *you have to..(1.0) write over these..these names..*"

In the final part of the turn the *solution* and the *evaluation* are conflated.

c) " then *this one has an advantage is* .. (evaluation) (Stage 1)
it is made ..with..with eeh *plastic leaf* pages...*then. you can wash with "water...this paper ....then..is..is..a new (1.0) leaf*..(1.0) *then you can use..it for life...*

The following description has been organised along similar lines although with more limited resources.

d) S: and...I choose...one note book..I think it's note book...note book. (Stage 1)
(opening)
I have no idea...oh yeah.. .address book.. (identifying)

it's good for organize people...to put eeh names... (function)
all the names...and telephones(1.0)...

I think ...theee (2.0). . address book's ... better to hand .. to handle
(evaluation)
and...you can (1.0)..brush and take out thee..the letters and put another one...
if then...one person die you can put another name ... (special function)

In spite of some typical problems which learners seem to have with structures requiring gerunds after prepositions, as in the case of , "it's good for *organize" people* , this learner manages to put his ideas across in a clear way. Strategically he combines two verb forms in tandem to supplement the lack of the form "delete" or the word "erase" in his lexicon , the result being.. "you can (1.0). .*brush and take out thee..the letters* and put another one". The subject has understood what you must do to clean the pages of the address book and recover a new clean page, but he has a problem of accuracy since he lacks the lexical items to explain the idea properly. '*Brush*' provides the idea of using an instrument to clean, and '*take out the letters* " is good enough to convey the meaning of 'deleting the writing". Finally, by resorting to the form "*the letters*", he has approximated the meaning of "the writing" , a form he cannot provide on-line.

Coping with ideational meanings: Some learners have serious problems in articulating the necessary ideational function about the object. The following learner begins her description by identifying the object as an "electronic key". This label carries some typical characteristic reference for the interlocutor to mark the semantic structure which the speaker is unable to provide due to lexical shortcomings. The 'name' provides some clues about the gadget to be partially recognised by the interlocutor but the multiplicity of functions still involve certain lexical limitations for the learner.

Excerpt 6.3: Coping with information overload- Semantic expansions

M : >>and..my second choose hmm **electronic key**.. (Stage 1)
..uh I think eeh...(1.5) uh *some people use it*..
eeh..*because it's...very...good idea*..very good
..*very witty* the.it..uuh (2.0) it's..eeh..*I don't know*..

it's.. eeh..(1.0) eeh...***bleeps***..eeh...and uh then you..

then it's eh *in the dark.. bleeps.. a little light...*
and it's give..*it's give...eeh ..time and eeh... date* eeh..eeeh...(5.5)
if...if... you wish eeh.. hmm (2.5)
the key eeh 10 metres away... eeh...it's uuh..it's bleep ..it's bleeps.
if you lose..lose key...you can...find it ...eeh quickly...quickly

The basic communication problem stems from the term "bleeps", used in the text to refer to the activation of sound in the key-holder in reaction to whistling. The gadget includes a clock to keep the time and a light which could be used as a torch to find the keyhole in the darkness. The triple function created an overload of information for the learner and the hardest part for her was to divide her attention in connection with the different functions of the device.

Despite the communication stress, when the learner deals with the meaning of *'bleeps'*, in connection with the sound made by the device, she coins a second meaning for the torch function which is embedded in the context : "*in the dark.. bleeps.. a little light...".* But then it recovers its real meaning with : " *the key eeh 10 metres away... eeh...it's uuh..it's bleep ..it's bleeps.* "

The learner has aimed at two meanings which she could not handle before by coining one 'new' word which reduces communication overload.

Restructuring information: The previous examples illustrate the point that conflictive meanings entangle the use of effective transitional communication. It is essential for speakers to deal with this frequent problem to be communicatively successful. One extremely interesting strategy is the attempt to provide a context which is semantically more transparent for the interlocutor to interpret the problem word in the direction of the speaker's intended meanings. The following examples illustrate the way some learners cope with this kind of communicative complication when trying to describe "an inflatable bed". The bed needs to be inflated for use by means of an adaptor for a hair dryer. It is easy to store because after use it can be deflated and folds into a carry bag. In one of the cases

there is a quick characterisation of the item in terms of its practical use to accommodate visitors.

Excerpt 6.4: Cause-effect strategies (Stage 2)

a) Giov : >>what I really would like to (h)ave.. is eeh..the kind..sort of
item...object..something eh.. **I don't know what to call it...**
but.. *it's eh. easier to store..in a (h)ouse* and(e) *you can immediately put up(e) ..guest(e).. for the night(e)(1.0) eeh...to sleep*
...you can manage immediately
(1.0)...you can use your....(1.0) driii-er ?
E: ..ooh..
G: to..fill(e) ..it(e) ..with air..eh blow
..and you put up(e) a guest(e).

Giovanna has difficulties in providing a name for the object she is describing but she manages to convey the function to clarify what it is. She also provides a very effective cause-effect explanation of how the object can be inflated to serve its purposes.

Charo, when describing the inflatable bed, proceeds as follows, (Stage 2)

b) Ch: *this extra bed*..is veryyy.. I mean *is an alternative*..and.. *when you have a guest in your house* and you haven't room for him. /problem/. .*and you haven't got..eeeh (1.0).. a bed for him..you* ..just have to inflat ..thiss eeh... bed...with your hairdresser... or from the vaccuum.., from the hoover..and then..the bed is ready /solution/.

Charo continually restructures the bad parts of her discourse, as she goes along. Her use of specific words and phrases to refer to this bed as an *"extra bed"*, *"an alternative when you have a guest in your house" and "haven't room for him" and "haven't got .... a bed for him.."* is a very dynamic strategy to generate concepts and ideas through colloquial , accessible language around the basic semantic structure. She is also resourceful enough when she senses that there is some sort of a lexical retrieval problem for "*hair-drier*", (a common problem in many versions) and using "*hairdresser*" instead. Charo's manipulation of a bundle of strategies that involve representation of meanings and form in one single operation to communicate the idea of a device that blows air such as "the vacuum" or "the hoover" reveals her skills to finally convey the basic transactional information.

Summary of features regarding transactional language use: As a result of the analysis of learners' performance in this section, the following generalizations could be made: (a)Effective transactional language applies to the information framework which the learner must access. (b)Succesful transactional speech requires the learner to draw on his lexical, syntactic and discursive resources to be capable of integrating his cognitive perception of the object to produce a coherent description. An explicit control of transactional information over the interactional information is then absolutely necessary to achieve this goal. (c)The strand of meanings which is most strongly enacted is related to the ideational function (Halliday, 1994). (d)These patterns of meanings, which are related to world-knowledge, are interspersed with other patterns, such as the problem-solution structure, to establish discourse cohesion.

The Role of Interactional Information

The role of interactional language as a discursive support may materialise in learners' performance in two tactical ways: (1) as an avoidance strategy to overcome communicative limitations and (2) as an achievement strategy to expand and add quality to communicative power. The following discussion provides an illustrative analysis of this dual strategic framework.

Interactional Language as an Avoidance Strategy: The following examples illustrate situations when subjects are unable to cope with the task demands due to conceptual problems, and decide to keep the conversation going through "socializing " language.

Excerpt 6.5 : Avoidance strategies (Stage 1)

a) Ozgul 1 :uuh I choose the calculator.. because. uh **(2.0)** *my sister.. needed a calculator.. I think.. that's a very good present.. for.. her..*
2: what is it made for..?
1 : this calculator..**(1.0)** *I don't understand exactly.. all the things.. but uh.. it's very interesting.*

When requested by the interlocutor to expand on the functions of the calculator Ozgul admits she does not know, after attempting an answer initiated by the sequence "..this calculator".

*this calculator..**(1.0)** I don't understand exactly*

Another characteristic example of avoidance strategy is a case where the learner has been unable to understand the core information about the address book provided in the catalogue. The subject decides to get involved in anecdotal comments about his personal life instead. His justification for choosing the address book because he is a very busy person fits better with the idea of a diary, than with an address book. The subject never mentioned throughout the task performance any of the real advantages related to the catalogue address book , such as its practical size, or its possibilities to erase unwanted information.

b) J: why the address book? (Stage 1)
Daniel: well eeh.. the address book, because.. the normal...
I'm busy.. I have different occupations.. all..all the.. week yeah.. uuhh..with the general of what I've got to work. my-yy...**(5.0)** uuh class..english class uh after..the university class..my spanish university class...(laughing) I have .. and another job because.. teaching spanish to children.. childrens of the british people...and I would like this because have a different rota in the week I do this..and.. it's eehh ...pffff....a long (e)story.

Interestingly enough Daniel is quite fluent when it comes to socializing language and he uses this skill strategically for chatting purposes.

This second group of illustrations on interactional language use as an avoidance strategy refers to a car cover.

c) Mujgan : it's useful in Turkey.yes, because...eeh (Stage 1)
eeh...*in Turkey...has got a bigger city...and...eeh.big share of pile of...trash* and...*it's...eeh important...the the car...very quickly...dirty*

Marcela : convenient eeh...this the cover car
because...is if..*if you haven't any place...to keep the car you can leave...in the street...*
and you can put the cover..

Cecille : *if you ..haven´t got a garage..and you want to go on holiday..and then you put your car outside.. and you know..you didn't want to use..* but you put

this cover*..but you have to..you have to.. leave in a very..**(1.0)** secu-secure place ...because it's very easy to take it..*

The comments of these subjects about the convenience of this car-cover are similar in nature to the previous ones. Mujgan refers her personal experience from Turkey, her native country, where covering the car has very practical consequences i.e. *...in Turkey...has got a bigger city...and...eeh.big share of pile of...trash and...it's...eeh important..the the car..very quickly...dirty*. Marcela and Cecille discuss the usefulness of the gadget if you do not have a covered parking place as, "*if you haven't any place...to keep the car you can leave...in the street*" or "*if you..haven´t got a garage..and you want to go on holiday…you can put the cover*".

The typical framework of interactional use as an avoidance strategy requires a move on the part of the speaker to embed information inside the description task which relates to personal experience. Address books are trendy because *"everybody has one"*. References to friends' opinions of the sort: *"they think..oh that's good...most useful for me"* , associations with their own life-styles, situations in relation to their country to justify choice are quite recurrent in the research sample. By referring the way these objects would affect or help their lives, learners' provide themselves with some discursive framework for grounding an explanation for their choice precisely on this anecdotal and very personalised value embedded in interactional language. This strategy supplements the limited resources in the learner to provide ideational meanings with interpersonal-oriented language and has a key role, under communicative pressure, in sustaining talk.

Interactional Language as an Achievement Strategy: When learners have reached the basic communicative goals required by the task, many times they decide to expand the core information through the provision of similar anecdotal references to those illustrated in the previous section for socialising purposes. Nonetheless, interactional language here serves a different role from the one previously discussed. Having supplied the necessary transactional information, the subject considers that

interactional information at this stage is relevant to the ongoing discourse, not just as a mechanical process of taking turns for social chat, but as a complementary way of constructing meanings.

The following samples illustrate how, after having reasonably reached the basic task goals, subjects consider it appropriate to expand their interventions. For example, Johann's interactional language is aiming at providing his interlocutor with his philosophy about Christmas presents. Johann considers that this interactional information is relevant to his discourse. Besides he has good rapport with his interlocutor.

Excerpt 6.6 : Achievement strategies

a) *Johann : for christmas you don't buy anything you need..really..you buy maybe..just for fancies– and you..you..you give presents only to make the other people funny...she (implying the person you give the present to) laughs about them.*

Another subject makes use of interactional language to provide alternative justifications which are not provided in the catalogue.

b) *Jose :uuhhh for Christmas..I think I'm going to-o buy..this hmm car-cover..I I think I'm going to give this to my brother because..*/M:to your brother?/ *yeah..he got a car..and..he have a car* ***(1.0)****..uh..he's in barcelona..* /M:hmm/ *and in barcelona..the the weather is quite* ***(1.0)****..uh..wet* /M: wet ?/*..and because..the.. the sea.. he he live.. in the seaside..and there is ..is too easy..****(1.0)*** *is too easy to-oo get the car..to get uh rust..*

Jose provides a very logical sequencing of justifications whenever his interlocutor intervenes and he expands the point which has been mentioned to him to make things clear. The reference is concerning his brother who lives in Barcelona, where the humidity of the coastal area makes cars rusty. This is a good justification for him to make his choice.

The following example illustrates the case of a subject who has clearly identified the device and knows how it works. His discourse is interspersed with interactional language which functions as an expanded reformulation of the basic communication framework.

(Stage 2)

c) *it's a handsfreephoning..* I think it's the last the last fashion.. the last model.. *because uh..it's.. there ..before..* I didn't see something like this..so I think it's very new..it's the last.. model..that the factory sent to the market.. uh that is..make this different the..the another old models.. for that I like this this model .. because..is uh more..made sophisticate..or there is new innovation. on ..this telephone.. for example.. uh there hmm *there is no.. no.. don't need.. uh any cord.. it's a cordless cordless phone /M:cordless? yeah/ uuh (1.0).. that means you can (1.0).. you can have your hands free.. to make notes.. to read or.. to write.. or to hand.. hand of some thing or to move around..hmm.*

It seems clear then that although the role of interactional language appears to be secondary to the central purpose of communication in these tasks, the value of such language type depends on whether the core information of the task (basically through transactional use) has been provided or not. Having reached the transactional objective, the role of interactional communication becomes a plus in the conversation. This involves an expansion of the core meanings about what speakers think in relation to the situation and how they feel about it. Learners might expand on the practicality, usefulness or aesthetical aspects of the objects described in relation to the speaker´s personal experience. The conversational value of this type of exchanges thus, becomes "functionally motivated".

The Use of Communication Strategies for Information Processing

The role of world knowledge and the problem-solution strategy

Research from the Nijmegen group reporting on the strategies used by L2 learners (Kellerman et al, 1987) emphasises the idea that when speakers examine novel objects in description tasks, referential communication is examined in terms of underlying cognitive processes rather than in terms of surface features of strategic utterances. This attitude seems to reflect similarities between L1 and L2 referential behaviour. But since the Nijmagen model distinguishes between types of strategies for *lexical access*, it does not necessarily provide evidence applied to other aspects of language development such as the organisation of discourse.

Learners seem to organise descriptive discourse by providing a schema with basic information retrieved from world-knowledge which might be termed 'a general state of affairs' or 'situation' in Winter's (1986) term. This general schema serves for introducing a problem which characterizes 'a specific state of affairs '. By analysing parts of the specific state of affairs in the context of the general state of affairs, analogies are established with reference to aspects of common knowledge. On the basis of world-knowledge learners construct basic information schemas which are shaped around what Hoey proposes as the problem-solution structure (Hoey,1982). Such a structure could be, presumably, widely accessible, so that a description of an object structured in problem-solution terms will then be understood more easily by an interlocutor.

The data analysis provides some evidence of how this strategy actually works when learners cope with description tasks. We can exemplify the use of the problem-solution structure by exploring some of the students' performances. In the first description which is explored, a learner tries to establish a link between parents, and babies who wake up at night and start crying. Elif begins by strategically setting the situation first. This situation refers to general world-knowledge in connection with parents and their concern for babies. This general situation is then narrowed down to the specific scenario of babies waking up in the middle of the night. At this point Elif proceeds to mention the object ("*some little round little fish*") for its identification and immediately adds "*works with batteries*". By enunciating the power-source of the object, the speaker has immediately established a cognitive link in the interlocutor's mind , which has to do with a battery-operated gadget. Then , Elif's constructs the basis for the problem with a conditional clause *"if then eeh ..the baby..start..to crying.."* and immediately completes the sentence with the potential solution , *"it can help long nights"* .

(Stage 1)

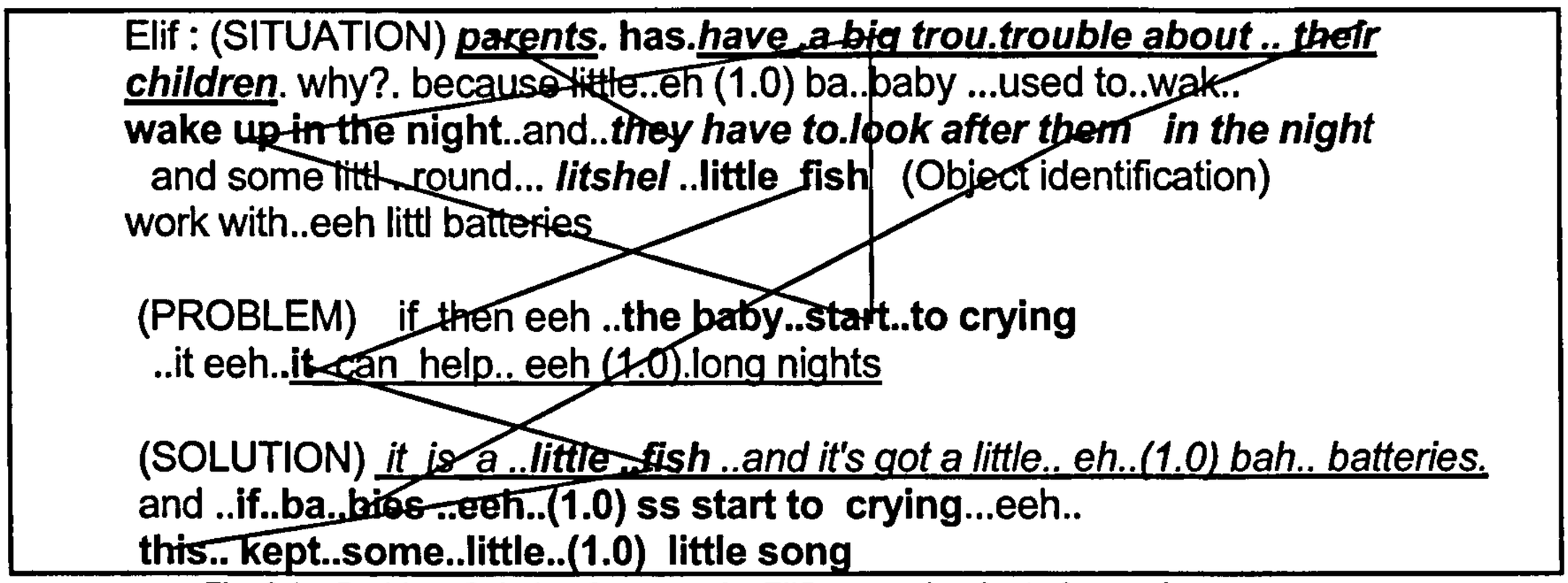


Fig. 6.1 : Problem-Solution Structure in Elif's mapping for 'reference'

When the learner introduces the physical characteristics of the object she focuses on its shape, which is small, round, and fish-like. She uses the word "litlle shell", because actually it is a shell-like object, although later on she opts for the holistic form "fish", which she feels comfortable about and is faster to use in processing forms. The shell-like object is then the solution to avoid, what would otherwise be, long nights if the baby wakes up. The problem is presented in a generic way by the use of the expression "big trouble", in reference to the fact that babies usually wake up in the middle of the night and start crying, a circumstance which triggers world knowledge.

The learner resorts to a combination of holistic and analytic strategies, which is a very common resource for reinforcing meaning. This circumstance is expanded with forms involving repetition which is used to reiterate the problem and its corresponding solution :"*if the babies start to crying, it (the shell-like object) can help long nights* ". Other forms of repetition within the same c-unit maybe used to provide an expansion about the object's function: "*if babies start to crying..this kept some little song* ". The repetition is initiated with a copy of the same previous structure referring to the problem ("*if the babies start to crying*") but this time adding "*this kept some little song* ". It can be inferred then that, since music relaxes people, the baby will go back to sleep.

Although in most cases the problem which needs a solution is clear in the subject's mind, sometimes what is not so clear is the way the device which is being described actually solves the problem. This is a matter of understanding how the device works. The idea that people have about the way things work in the real world is, on the whole, very general, and in most cases naive. These mental representations of devices - and the way people believe they do their work- totally depend on personal experience and specific knowledge. If this knowledge is incomplete, the tendency is to complete whatever is missing with an intuitive approximation or guess work. This inaccurate and incomplete version of knowledge is known as a "mental folk model" (Kempton,1987)

Elif's performance can be contrasted with a second learner who has a clear idea of the problem but has been unable to reach an accurate understanding of the solution. The deficit in knowledge concerning the real solution is handled, almost intuitively in this case, by an approximation to the real solution.

(Stage 1)
Excerpt 6.7 :Problem solution strategy

a) Cecille : (SITUATION) if you've got a.. baabyy
..you got more...a very small baby... you know.. and.. then..eeh... you worry.. and you want to check.. every .. a lot of time.. you know.. at night.. how is he.. (PROBLEM)..and then..you can't sleep very well... and quietly..

(SOLUTION) for that..you've got a small thing.. you can put at the baby.. and then ..you can.. with another. .you can check it..if..if the baby.. is sleeping.. or crying.

As a result the object is conceived here as a device to check whether the baby is "sleeping or crying", when what it actually does is emitting relaxing sounds which put the baby back to sleep.

There are some stylistic variations to the problem-solution strategy but which follow exactly the same discursive pattern. The object is identified first, together with its characteristic function or purpose. The learner uses a structural pattern along the lines of previous samples which begin with an attempt to identify the object and then develop into an explanation of the function of device.

(Stage 1)
b) Jose : *(identification)* it is uh a thing..uh..*where*..you connect it in the in the..
plug..*because working with electric*..**it's electric..**

The learner resorts to the most common hyperonym to refer an object , *"a thing".* His second conceptual target is to qualify the object as an electric device. In order to do this he tries three forms 1) "you connect it in the plug" 2) " "because working with electric" 3) "it's electric".. The role of redundancy here might be two-fold : Possibly the role of (2) is to clarify the meaning of "plug", which the learner, through personal experience, might consider problematic. And the role of three is most probably restructuring, an attempt to be accurate.

c) José : and you put uh (*)....in the.. room where is the baby..and..
tha-at..make uh a very soft and **qui-et noise**..(1.0) (*function*)
and ***that noise*** make the baby..hmm fell to sleep..

Strategic resourcefulness in learners allows them to combine different strategies. The following learner first identifies the device for the interlocutor and then points out its purpose. She proceeds to identify this object in a few very precise utterances : "*a new device..definitely. it's to keep the child quiet..it's a device to put ..beside the cot..*" Then she fits that initial phase into the *problem-solution structure* by framing her description within a personal experience as a mother.

(Stage 1)
d) Elana : *this thing surprises me because it's the first time I've seen that..*
I mean I should've known what's that.. because I've got.. children..

.. that means ..a new device **...** definitely . it's to keep the child qui-et
(1.0)...quiet ..it's a device..to..put beside the eh cot. ***(identification/purpose)***
in the beginning when I saw that picture... I thought it's thee (1.0)..it's like
ha-larm if the baby's *sleeping ups*. .sleeping upstairs and I'm downstairs..and
he's crying .. *(*SITUATION/PROBLEM*)*
it...would give me a (1.0).....a buzz (SOLUTION)

Fluency in expressing ideas through a transparent use of a tense variety improves the way of organising the information and reinforces strategic use.

The effectiveness of the problem solution strategy as a discursive tool could be illustrated even in the case of learners with more limited interlanguage and accuracy problems. Marcela is able here to overcome some of her systemic limitations by organising her discourse along the lines of the problem-solution structure.

e) Marcela :*(Identification of object)*it's like a machine and (2.0) ...take ...eeh ...has ..music.. (SITUATION-PROBLEM)..when...baby...when it..it...eeh..wakes up...in the night. ..and this machine working..... it is...in the crib...with baby (SOLUTION) if...eeh he or she...wake up....the machine eeh...play some music /S:uhmm / ..for to-oo (2.0)...to make him...to sleep.. /S: again / to sleep again.

From the analysis of the data performed until now, it could be generalized that learners cope with description tasks by developing a general conceptual schema which corresponds with the Problem-Solution structure. This strategic method of organising information triggers production and adequate processing in the speaker and facilitates the interlocutor's understanding. This cognitive construct provides learners with a schematic framework for description to fill in information details which are mapped onto a situational sequence related to world knowledge and the functions of gadgets. The situational sequence creates a mental picture of a *general state of affairs* which provides the grounds for the interlocutor to establish an analogy with the *specific state of affairs* related to the object of the description. This course of action enables the speaker to reduce potential lexical or structural problems while his descriptive discourse is in development. Reactions from the interlocutor signal the speaker to supply additional cues for clarifying misunderstanding or enhancing comprehension.

The Maxims of Clarity and Economy in Learners' Strategic Use

The problem-solution structure also allows us, for this particular context, to integrate and re-interpret some other principles of communication, those of clarity and economy. Speakers in general must strike a balance between the intelligibility of their messages and the processing effort they and their listeners put into the production and reception of their messages. This is what Leech (1983) refers to as *the principles of clarity and economy.* Language learners seem to adhere to these very same principles because (a) they allow them to solve communication problems effectively and (b) they provide them with extra processing space to cope with on-line production.

The compensatory strategies collected in the Nijmegen project (Poulisse,1997) seem particularly relevant to this matter and provide evidence of how learners very often try to comply with both principles. If interlocutors indicated understanding of descriptions through compensatory strategies, reference was then established in the most economical way possible, but if the explanation had not been understood, speakers would gradually proceed to add more information while continually checking understanding until the communication goals were reached.

In the previous section, it was emphasised that even learners with very limited interlanguage implemented a discursive strategy along the lines of the problem solution structure. The use of this strategic procedure complies with the principles of clarity and economy and allows learners, as evidenced in the following example, to cope with the communicative aim despite the limits imposed on them by their available resources.

Excerpt 6.8: 'Clarity and economy' as a strategic principle (Stage 1)

a) E :>>and..eh **the-e (stutters) caaar cover**..and eeh.. (identification of object)
all the people … have have a car..cover. (situation)
but..eh..**it is..eh. very thick**..very..tttick (problem)
..(stutters) **and**.eeh..eeh **long car cover**..eh..

ehh people <2> got some..eeh_ some ***trick***.. (solution)

eeh ..*what's..that* uuh.. it..is..it can..be..eh..
little ..**if..they didn't use**.. and eeeh..
for...to k.k..ee..e.. for to ..keep it..as..**it's made**...
o-oof eh ..**nn-nylon** so..they..easy to-o..try it.. make it... small

The learner makes a very elementary first discursive move to announce the object which she is going to describe and immediately tries to convey a general state of affairs (*"all the people have a car..cover")* followed by a specific state of affairs which enunciates the problem (*"but .it is..eh. very thick...and. long car cover..*"). The solution is introduced by 'double-marking' the discourse section which initiates the solution. These very intuitive and basic discourse markers function as signals for the interlocutor to follow the message accordingly. The use of the form "people " in the *solution frame of the discourse* might seem ambiguous for reference because in the first mention, in the *situation frame of the discourse* , it had been used to refer to "people in general". But this potential ambiguity is resolved because of the phrase "all the people" which represents people in general while in the second mention "people got some trick "is easier to be interpreted as "the manufacturers of the car-cover" because it is in the context of the solution

b) people got some..eeh(1.0) ***some trick***.. (solution)
eeh ..***what's..that*** uuh..(0.5)
it..is..**it can..be..eh.. little ..if..they didn't use**.. and eeeh..(2.0)
for...to k.k..ee..e **for to ..keep it**..
as .**it's made**..**o-oof..** eh **nn-nylon** so..they.. easy to-o..try it.. make it... small

The problem-solution strategy does not only provide signposts for the interlocutor to frame discourse but also supports the learner's use of lexical and morphosyntactic devices to put meaning across. It is in this interweaving of resources that phrases like "*it can be little..if they didn't use...for to keep it.. as it's made of nylon* "" may be interpreted, due to the context of the discourse structure, as "it may be reduced in size when not in use because it is nylon-made". The evaluation part of the discourse by the interlocutor also serves as a confirmation check-up that the description message has been properly delivered.

c) G: ..**so you mean..eeh youuu can keep your car outside**
/ E :yes /...without..to put it eeh in a garage /E:yes,yes/
..or something like that... /E:yes,yes/ **very useful**..yes (evaluation)

Further evidence of how the principles of clarity and economy are embedded in the problem solution structure is provided by its facilitative role in easing communication problems. In the following excerpt, the speaker chose an adequate term, "a tiny personal organiser", for reference, and although there were no negative cues on the part of the interlocutor for recognition, she proceeded to explain some of the functions. When the interlocutor confidently decided to label the gadget as "a reminder", the speaker, trying to be economical, used that term as a referent and added some clarification that there were more functions performed by the gadget.

(Stage 2)

d) R*: uuh* ..mine ..is **a tiny.. personal.. organi-ser..** *and I think its useful to take it..because..eeh (1.0) you..*you can remind the things you have to do..*eeh..*
because that's a calculator..that's a compact..calculator..
E:it's exactly eh..a reminder..
R:..reminder..yeah.. but it's not only a reminder..you can make eh..an alphabet..
well..alphabet numeric..data..*accountance..(*accounting*) it's everything in one..*

If recognition of reference is not established in a dyad, the speaker may decide to continue using increasingly more elaborate references until this is achieved.

e) M: *yeah*...I saw here a data card you know */Jose: data card ?/*
data card../J: what's this ? /
this is.. like.. like a small computer.. *it's like a....* *I'll explain what is a data card.. this is a card..* **it's small.. this size..** *and you can use uh..**(2.0)** you can put in..***which you can put in some informations** *you know.... it's like a computer.. like a small computer yeah/ and you can uh.. li–i i..like..**(1.0)*** **like uh appointments.. you know** if you need something **.. like uh.. something to buy.. you can** you can check.. you can put..a lot of things.. in this.. in this small computer.. put in in one year in advance *you know.. can use it one year in advance..* **can put everything like..uh.. uh an alarm.. you know.. you have an alarm.. a clock..**

The interesting circumstance about the procedure is that the discursive effort is not wasted because the speaker has provided a temporary label, "it's like a small computer", (principle of economy) which is used to launch the rest of the information about the different functions of the device in a

comprehensible way (principle of clarity). The use of redundancy via repetitions reinforces communication.

The next learner has organized her discourse structure based on similar lines to the commercial language used by the shopping catalogue to attract the attention of potential buyers. The commercial catch-phrase came out literally as: "If you need an extra bed and you don't have the space for one, there's now a sensible alternative ".

María has used the problem-solution structure embedded in the message to organise her description.

(Stage 2)

f) M : ..well it's ..for example..if you have a ***guest night..*** and you don't have another bed.. for them and you need one place for them to sleep and you don't have more beds left at home ..is one special bed..that you inf..youu..(1.0) you just need inflate.. the this thing.. with a-ah (1.0)..hm.. with aa..hair drier or a vaccuum cleaner..

María's creation of "a *guest night* " is an excellent synthesis of the principles of clarity and economy. Immediately after that sample of strategic effectiveness, she believes it is necessary to expand on the topic of "unavailable beds" in a redundant way. But this expansive reference of the same ***problem*** in cascade fashion "*you don't have another bed.. for them* " and " *you need one place for them to sleep*" and "*you don't have more beds left at home*" prepares the way for providing the ***solution***.

Learners seem to intuitively value any attempts to balance the linguistic efforts invested in communicating and the contribution of clarity to their messages. The variety of strategic resources generated by task demands to comply with clarity and economy in language use underline the importance of these two basic principles. From the analysis of learners' use of the *problem-solution strategy* to cope with description tasks, it could be generalised that this discourse framework is also governed by this balance. Its contribution to the improvement of speech production in dialogic tasks stems from its instrumental value in clarifying essential points of reference and economising efforts to organize relevant information.

Cohesion: How utterances are made accessible

The role of repetition: I turn next to the importance of cohesion in communication strategies, i.e. the way the subjects mark explicitly the connection between utterances. The notion that repetition serves to show the relatedness of sentences to provide coherence in texts has been interestingly developed by Hoey (1991 :51). Repetition is the typical feature that helps to "glue" pieces of information together. Most texts are connected by multiple repetitions. Hoey claims that looking at texts as interrelated packages of information and the observation of repetition in a text may allow us to discover coherence through these cohesive devices.

The most common kind of cohesion is achieved via partially repeated structures, although at times, this may be disguised by the grammatical form involved, i.e., either by substitution, deletion, or by a combination of both forms. Several examples provided from a variety of descriptions in the present data illustrate this point.

The following examples illustrate the typicality of repetition as a cohesive device.

Excerpt 6.9: The strategic role of repetition
(Stage 1)

a) Ina *: well..* **I choose..uh..** this one..ever-lasting address book.. **because..** is..a book..address book.. *but eh.. wait now* ..where you write address a lot../L *:uhumm/* **but eeh..** if eeh.._the address..(2.0) is obsolete..*hmm eeh..you know..* when.. people *change* address.. you can.. *delete..* old address..with a damp cloth..

(identification/function)

The speaker first identifies the object with its commercial name and then she proceeds to explain its advantages. She repeats the form '*address*' six times. These repetitions allow her to say something again in order that something new may be added. The additions are introduced with connecting words such as 'where ' , 'when', or through parallel structures which provide syntactic flexibility to the discourse. This sequencing of repetitive forms, which are colour-coded or underlined to facilitate identification, seems to be an intuitive strategy used by several learners.

Judging by the interlocutor's reactions which follow we can see that the meanings are effectively communicated.

This repeating function has informational value because it provides a framework for interpreting what is added along the way. Sentences are connected by multiple repetitions. Those sentences which are particularly essential to the development of speech production will show more connections or *links* with the rest of the sentences (Hoey,1992).

Although parallels which account for cohesiveness are not always evident, learners make use of a number of simple processes which echo the mental operations that help language users create cohesion in utterances and interpret them coherently. These processes are of various kinds, some of them involve *lexical features*, others are *syntactic* and a few are *discursive* in nature.

Repetition and lexical expansion: The first strategy consists of the interpretation of words, both in isolation and in combination, aiming at *lexical expansion*, through an information gap-filling process based on previous mention or world-knowledge. The activation of this strategy results in an expansion of the label which is applied to the object being described.

For example, Marcela operates with this type of strategy for cohesive discourse development :

(Stage 3)

b) I choose..**the-e sa-fe..gate**.. *is a gate*.../S:uhmm/
and *you can put.. between the stairs.. and the corridor*..
is (e)special for the child..eeh.
you can put the gate.../between the stairs..and the corridor/
and that way... *you can..safe..thee the child* ..
cann ..fall off.. around the.. the.. stairs

/S: aha / do you understand? / S: aha /

In her initial utterance, Marcela provides the commercial label for recognizing the object , but her next utterance starts unpacking the term 'safe gate' by stating that "*you can put.(*it*). between the stairs.. and the corridor*..

is (e)special for the child..eeh." This process provides more explanation into the word "safe gate" by spelling out the implications that it is to be used inside the house to protect children from falling down the stairs. The purpose of the expansion is to make it possible to get maximum sense out of references by the provision of contextual meanings.

In the last part of the description Marcela repeats the same structures she had used before but adds new information :

the-e gate..you can put ..between ..the walls and the-e ***(2.0)*** *thee /S:the stairs/yeah.. the the stairs*
and without ..damage the wall.. the paper.. or the paint.

The same phrases used by Marcela before to refer to the place where the safe gate was installed create , now, via repetition, some devices to add information. The new information relates to the fact that installing the safe gate does not damage the wall. The extended references to "paper" or "paint" are redundant markers of material used on walls and emphasizes the idea of "no deterioration".

When learners apply *lexical expansion* they provide a central key term, which serves as a starting point for developing the expansion. For example in the case of defining an object it implies providing some image created through recognisable characteristics or some specific functions that are related to cognitive meanings. These expansions lead the interlocutor to mental associations with things about the world known from personal experience.

Lexical expansion is also used strategically by learners with low interlanguage level as the following example indicates:

Excerpt 6.10 :Lexical expansion
(Stage 2)

a) D : another interesting...thing is..eeh..(**4.0**)working wi-iith eeh..**(2.0)** **shine..***sun-shine*..
J: sun-shine..you have it.. then.. with the light..
D: ..solar..yeah **(2.0)**..uh..don't need eeh **(1.0)** .. change the batteries..working with.. sun

All the examples below follow the same lexical expansion strategy.

(Stage 2)

b) M: it's the anti-theft (car security device) ...is like a machine...you can put ***in your car****..and if eeh..someone try..to.. steal..your car..****(1.0)*** *and then...the .the alarm ringing.*

c) E *:something that's really interesting..it's eeh..for eh* ***(1.0)****specially..for..* **anti-tiif..** ***it's eeh (1.0) special thing to put in the car..***

(Stage 3)

d) *Mo :* ***/it's a gate*** */C:yes/ do you know what* ***a gate*** *is?* (the safest stairgate) */C: uhumm/* ***for small children.. which you can put on front of stairs ..***

The learners in these examples can use lexical expansion on the basis of the mental association which can be established between a device (an antitheft device to protect a car, a gate for children, to protect children) and what is expected from it in terms of its typical function . The interlocutor builds up the mental picture of the device, which is predictable by analogy with similar gadgets from the real world. But in certain cases the inferences which can be established between the device and its expected function may be more complex.

Most texts will make sense to readers or listeners because they are able to "recover" the parts that are related. Language users need to make the links between the parts of texts recoverable to enable comprehension. The key notion behind cohesion then, is that there must a *semantic tie* between an item at one point in a text and an item at another point. This is precisely the role which these learners have assigned to these variable types of repetition. These resources provide support to people's imagination to come close to the real object being described until recognition is achieved. Learners are prepared to spend a lot of effort to achieve their communicative goals and this is easily perceptible in most of the examples, but in most cases the tendency is to maintain a reasonable balance to keep clarity and economy under control.

Reformulations as a variant of Repetition: Alternative cohesive resources have surfaced in learners' strategic use to cope with descriptions. Learners resort to reformulation of ideas through syntactic variations to simplify information containing complex concepts. The characteristic of these attempts is that they aim at providing meaning equivalences to language forms which are not yet accessible to the learner and relate to syntactic development. These "equivalences" try to establish certain conceptual analogies which although not exact as the intended meanings are recognisable as approximations to the reality they refer due to contextual support(Hoey,1991). These forms are probably more frequent in nominal groups but they may also occur as in the following examples :

Excerpt 6.11: Strategic Reformulations

a) *D :* well.. you know ***the problem..about this.. animals***. .yeah
these very.. familiar animals
(ha)..eeh..because..hm..ho-oh (tip of the tongue phenomenon) eeh..carr..carry..
Staboli:.<<*.yeah* **they carry illness.**>>
Dan: **<< *carry...illness*>>**..yes..*pests*..I think..this.**
this..is the.. really...thing.. *I mean..*

In this case we have the nominal phrase "*the problem about this animals*" equated with the noun clause "*(that they) carry illness*" The equivalence is recognisable despite the omission of the copula.

(Stage 3)

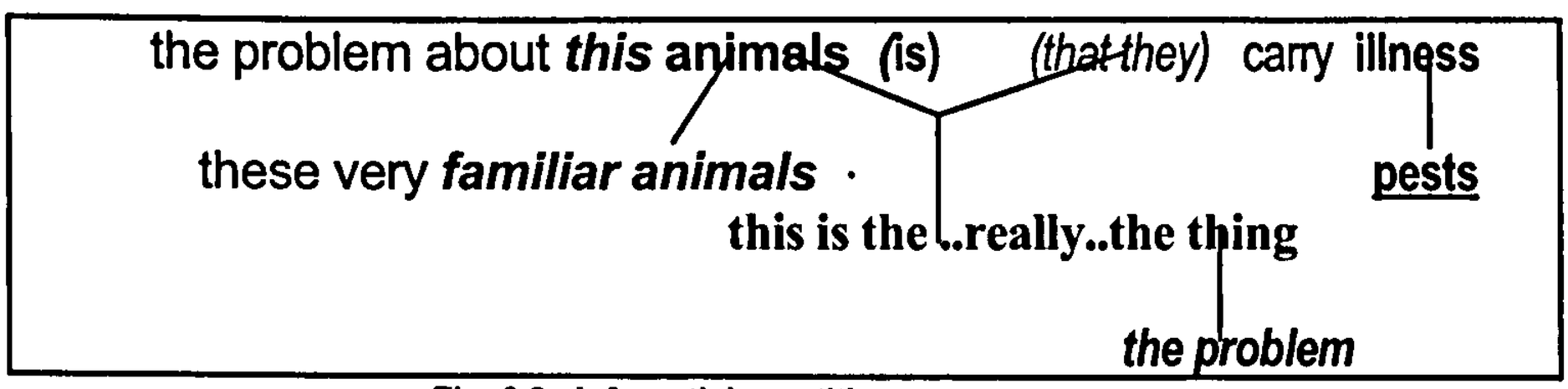


Fig. 6.3 : Inferential repetition

The relationship is established with the final statement where "the thing" is a repetition of "the problem".

The same learner makes use of his syntactic creativity through syntactic paralellism when he is trying to explain the effects of using a 'sonic pest repeller' to keep mice and cockroaches at bay. The resulting "code

strategy" is a *coinage* obtained from an analogy established with a systemic form, a 'place adverbial' , which is recreated here with the dynamic value of a transitive verb form .

b) *D:*because.. **if you *outside* the animals.. you put outside the-e the pest..**

At a much simpler level the same strategic principle is operative when the learner reprocesses the same "state of affairs" through the following forms :

c) M: maybe..**if you..want...want..to..to keep..keep the car..**yeah for the..if..if for example...**you haven't eeh park ..to keep the car** /S:yeah/. ..and **you have to leave the car...in the street.**

The use of these parallel infinitive structures to explain almost the same idea works as a "processing rehearsal", which includes several search trials for the most adequate way of communicating the idea. These apparently incomplete attempts constitute a good exercise for better approximations to more complex versions. The resulting product would be something along the lines of ..."*If you haven't got a garage to keep your car and you have to leave your car in the street, you should buy this car-cover. "*

According to Pawley and Syder (1983) , some speakers favour a similar syntactic strategy to the one presented here, called "the clause-chaining style", which is used to formulate spontaneous connected speech. With this style "a speaker can maintain grammatical and semantic continuity because his clauses can be planned more or less independently, and each major semantic unit, being only a single clause, can be encoded and uttered without internal breaks" (Pawley and Syder :203). This 'one-clause at a time facility' seems to be an essential constituent of communicative competence in English because it seems to be one way to achieve the other necessary requirements of speech in terms of coherence, discourse planning time and situational demands of production as a whole. Next to this strategy is probably the use of ready-made lexicalised sentence stems

that play an extremely important role in allowing time-saving devices for confidence and speech planning .

SUMMARY OF THE DESCRIPTION TASK

The qualitative analysis of learners' performance on the description tasks provides some basis to hypothesise that even when learners' efforts are strategically devoted to problems either at the lexical or at the syntactic level, the strategic solutions to cope with difficulties are generally operationalised with the discourse level in mind. This is probably because communication problems are more likely to be repaired and organised at the highest and most flexible level.

Another important observation to be made concerns the fact that learner strategic use of repetitions aims at constructing coherence. Some very well established parallelisms between the contexts in which different forms of repetition appear are clearly oriented towards the formation of discourse. Various illustrations of these recurrent tendency continue to appear over times two and three.

Description Times Two and Three present more typically extended efforts to cope with descriptions. These more elaborated attempts might have been the result of the combined circumstance of more complex technical aspects in the objects to be described and the learners' progression in their interlanguage. This progression is supported by the quantitative results of accuracy and complexity values together with the use of more pragmatically-oriented language revealed in the ratios of transactional vs. interactional scores.

Uncommon objects like those selected for Description Time Two stimulate the generation of more demanding language processing. Communication strategies are then called upon when there is an imbalance between possibilities for analysis and conditions for accessing information.

Descriptions provided by different subjects at Time Three display repetitions which are readily seen to be related, a circumstance which the interlocutors have also perceived. The simplest principle involved in these repetitions by non-native speakers is that these "items" or phrases which signal a recurrent reference allow the speaker to say something again in order that something new may be added. There is certain partially hidden parallelism of reference created by speakers in order to link or juxtapose sentences. There are certain words or phrases which, although not present in the actual utterances , may be inferred by the interlocutor.

Most of the cases analysed in this chapter illustrate how learners cope with descriptions. They stress the importance of background knowledge for lexical access and show the extent to which the learner can establish a semantic network and proceed to interweave lexical devices into a morpho-syntactic framework . Much of the enormous effort which subjects spend on building up cohesiveness in their descriptive discourse is *strategical repetition*. The amount of effort is most certainly related to task complexity . But this effort is only directed to what the speaker considers to be relevant for the purpose of clarity in communication. If the information is considered to be irrelevant or secondary to the point being made, the speaker will be inclined to devote less effort and the principle of economy will prevail. In general terms subjects tend to maintain a reasonable balance between these two aspects of L2 communication.

Consistent with the theoretical framework used in this research, learners' performance has been assessed in the context of three processing factors fluency, accuracy, and complexity. While fluency concerns the primacy of meaning and indicates good discourse planning , accuracy concerns control of language use at the expense of more challenging interlanguage. Complexity reflects the learner's potential to stretch his/her interlanguage competence (Skehan,1998).

There appears to be some sort of impact through time in the description tasks in terms of complexity scores. This is also evidence of a risk-taking trend to produce more language as indicated by the increase of subordination registered time-wise. The scores for accuracy also indicate a positive trend in twelve cases. This statistical picture, combined with the ratios established overtime by the mean scores of complexity (3.14 at Time One vs. 3.67 at Time Three) and accuracy (76.64 at Time One ; 79.60 at Time Three) highlight a positive trend of the group as a whole towards progress in language use. If the previous results are crossed with transactional language use, as previously illustrated in Table 6.5, we will see that the use of transactional language presents an important progressive increase through time. This variable performance, in the light of the longitudinal dimension provided for this research design seems to suggest that some sort of change is going on among learners towards a potentially more robust and effective system.

Specific comments have been made in the section related to qualitative data analyzing learners' behaviour at important points where they need to compensate for lexical and syntactic shortcomings. The most important aspect of the qualitative discussion is the last section which deals with evidence of the activation of communication strategies to organize discourse structure. These strategies involve combined representations of meaning and form. Meanings are mapped on to a framework which operates on the basis of the problem-solution structure. Forms establish connections in the framework via repetitions. It is the use of repetitions organised around the problem-solution structure that seems to provide cohesion and coherence to discourse . The possibility of handling very similar descriptive tasks most probably helped learners to generalise specific aspects of problems found at Time One and Time Two of the experiment, and apply successful strategies to cope with difficulties later on.

There is partial quantitative evidence in support of the hypothesis that the key point for progress in interlanguage development seems to be

somewhere along that balanced compromise among fluency, accuracy, and complexity. The qualitative analysis provided in this chapter intends to characterise some of the learners' most typical efforts to reach that equilibrium. A more discoursive use of language seems to be targetted by learners in terms of communicative achievement . This is reflected in their attempts for overcoming obstacles and generating the necessary cognitive processing to generate more and better language.

CHAPTER SEVEN

THE DATA ANALYSIS (2): NARRATION TASKS

Aims of the research on narratives

The main objective of this second part of the data analysis is to explore how the nature of narration affects processing goals, and particularly to explore the influence of narrations on the production of accurate and complex language.

There is a long tradition of using story-telling tasks in SLA research, mainly because narratives contain an element of familiarity for most learners and rather than being interactive in nature they provide greater independence in terms of turn-taking. As a result, they can be labelled as more monologically-oriented than other task-types. This specific characteristic of narration encourages intensity of concentration on the part of narrators and listeners to identify and follow the story-line (Black,1989).

Narratives in general transcend the framework of descriptions by providing a temporal dimension. They are constructed through specific levels which begin with an initial setting of the scene and develop onto subsequent scene stages. The scenes that make up the story are, first of all, conceived as parts of a whole having a beginning and an end. Then they expand, in gradual stages of intensity, into sequences of events and actions in which there are characters affected and implicated in the plot, and finally evolve into the story's "denouement".

Important research involving a cognitive point of view on learners' performance of narrative tasks has been done in the past. Researchers have pursued specific goals, either to determine degrees of communicative

difficulty, (Brown and Yule,1983), to clarify the abilities required to cover story details (Yorio,1980), to characterise narrative schemas and communication strategies for processing information (Dechert,1983) or the intervention of the teller to furnish a more vivid and involved experience (Wolfson,1982)

Research has also reported that performing a narrative describing events that happened in the past, with no context support is facilitated by control over tense markers, embedded adverbials of time and location, and sentence connectors. Describing events that are happening before our eyes is functionally less demanding, and cognitively less complex (Sachs,1983, Meisel,1987). Robinson (1995) found that the complex There-and-Then condition elicited more accurate speech, with a trend to greater disfluency, with signficantly greater lexical complexity, but with no significant findings for syntactic complexity. Similarly, performance on a task that requires the learner to distinguish one person from a larger group demands control over a wide range of deictic expressions and relative clauses, while the description of a single person is certainly less demanding (G. Brown,1995;G.Brown et al.,1984). Some of the empirical issues contained in those studies have provided theoretical support for this research.

This study will specifically assess cognitive processing in FL learners' performance, following Foster and Skehan's (1996) research framework to evaluate the role of learners' strategic use for fluency, accuracy, and complexity effects in story-telling.

The Narrative framework

As with the descriptive tasks, a clear general schematic framework establishing the basic structure of the story-telling task was introduced at this stage to enable an evaluation of the learners' communicative effectiveness. This sort of 'narrative -skeleton' serves as a template of the "ideal stages"

implicit in any story for assessing the learners' actual performance during the task.

The narrative framework operates along three basic stages: a) scene setting, which marks the episodes along the story; b) problem development, which relates to the successive episodes of the narrative evolving from some difficult circumstance into a climax ; and c) the resolution which unravels the final events and provides the outcome of the story.

Stage A	Stage B	Stage C
Scene Setting	**Problem Development**	**Resolution**
Identification of characters	Identification of characters	Identification of characters
Location and Time Shifting	Location and Time Shifting	Location and Time Shifting
Logical Sequencing of Events	Logical Sequencing of Events	Logical Sequencing of Events

Table 7.1 Narrative framework

Three specific aspects of the narrative structure constitute each stage: identification of characters, location and time shifting, and logical sequencing of events. These elements are closely interspersed and interact in bundles of features through the narrative. The identification of characters at relevant places in particular moments is intertwined with the logical framework, based on elements such as attribution of motives, the interpretation of characters' attitudes in response to the development of events, and the analysis of means-to-end results.

On the basis of the proposed narrative framework , a short summary of the stories is provided below together with tables of structured information about each narrative. The first column refers the number of characters involved. The second column provides the setting where events occur, and they signal the point where a shift takes place. The third column includes the development of events. A view across columns provides the integration of characters, location and events, as single factors which are gradually expanded along the story-line.

Narrative Time One : *The Envelope Story*

Narrative Time One is about a young man who is apparently spending his holidays in France. As he is sitting outside in the street at a French café, an older man approaches the young man with a wallet in his hand asking him if the wallet is his. The young man looks grateful. The man sits at the table holding a cushioned-envelope in his hand. Apparently the man asks the young man to take this envelope with him. The young man crosses from France to England with a group of friends. When they arrive in Dover, they go through customs. A customs officer discovers, on inspecting the envelope which the young man carried in his hand, that it contains heroin.

Structure of Narrative One

Characters involved	Location involved	Events involved
1)A *young man* 2)A *middle-aged man*	1) Street Café in France	a) a middle-aged man returns a lost wallet to a young man. b) the middle-aged man produces a padded-envelope which is handed to the young man.
1)The *young man* with *a male* and *a female friend* in a van.	2) Dover Port	c) the young man crosses to Dover with two friends.
1)The *young man* with a male and a female friend 2)The *customs officer*	3)Nothing-to-declare section of customs in Dover	d) the group enters the nothing-to-declare section of customs for baggage inspection. e) the customs officer finds heroin in the padded-envelope given to the young man at the café.

Table 7.2 : Narrative One

Narrative Time Two : *The Supermarket Story*

The supermarket story presents a very simple situation where a mischievous child creates a problem for a young woman shopper by sliding a bottle of an alcoholic drink into her handbag while she was distractedly talking to the child's mother. The climax is reached when the young woman is accused of shoplifting on the way out of the shop.

Structure of Narrative Two

Characters involved	Location involved	Events involved
1)A *young woman*	1) At a supermarket	a) the young woman begins her shopping round.
1) The *young woman* 2) A *young mother* with her *3) young daughter* in a shopping trolley.	2) Inside the shop	a) the young woman meets a friend who is also shopping with her child sitting in the shopping -trolley. c) they begin chatting d) the baby daughter grabs a bottle of spirits from the shelf and puts it in the young woman's bag.
1) the *young woman*	3) At the cashier's point	e) the young woman goes to pay for her shopping without noticing the bottle in her handbag.
1) the young woman 2) a lady shop-detective	4) Outside the shop	f) the lady shop-detective accosts the young lady outside the shop.
1) the young woman 2) the lady shop-detective 3) the supermarket manager	5) At the manager's office	g) the manager is telephoning in his office in front of the young woman and the shop-detective.

Table 7.3 : Narrative Two

Narrative Time Three : *The Castle Story*

This third narration presents a variation on the theme provided by the first two narratives. Narratives one and two deal with two situations where there is a presumed violation of the law . But the third story concerns a curious anecdote affecting a couple that goes to the countryside and visits a castle on the weekend. The story is an illustration of those unexpected moments where strange things happen and most people are not aware of them.

Structure of Narrative Three

Characters involved	Location involved	Events involved
1) A young couple	1) On the road	a) The couple initiates a trip
1) The young couple	2) At the inn	a) The couple decides to stop at the inn.
1) The young couple 2) An old townie	1) At a table in the inn	c) The couple is having a drink with a stranger at the table.
1) The young couple	4) At the castle ruins	d) The young couple goes uphill to visit the castle ruins e) The couple takes photos f) A bride appears behind the woman during the photo session. g) They look for the bride. The bride is nowhere. h) A cemetery appears near the ruins.
1)The young couple 2)The apparition		
1) The young couple		

Table 7.4 : Narrative Three

The situation is created in the atmosphere of an old castle where an apparition emerges while the man is taking photos of his girlfriend. The story-line forces the speaker to hypothesize and justify, providing the sort of language typical of argumentation.

In the next section, the quantitative analysis will concentrate on the levels of accuracy, complexity, and fluency detected in the learners. This will be contrasted with the incidence of transactional over interactional language use for the three narrative tasks. The areas of more communicative difficulty , the use of narrative styles , and the sort of strategic choices made by learners to overcome problems will be targetted in the section dealing with the qualitative analysis.

Quantitative Data :The effects of time

This section of the analysis targets how effectively learners have coped with narrative tasks, measuring performance in terms of fluency, accuracy and complexity. Successful narrative tasks require the use of clear reference, location and time shifts. Awareness on the part of the learners about these central discoursive requirements will be reflected on the subjects' performance and relates to the development of the learners' communication skills in the context of transactional language use. This area of performance will be examined after the results for complexity, accuracy and fluency have been presented.

COMPLEXITY

The raw scores for complexity are shown in Table 7.5. The mean scores show a regular increase of complexity over the three time periods, From 3.34 at Time One, to 3.93 at Time Two to 5.10 at Time Three. A one-way ANOVA showed these differences to be significant at the .01 level. This situation is the result of the reduction of the average of C-units from Time One (13.94) which gradually decreases to 10.19 at Time Three. Conversely there is an increase in the number of clauses per C-units from an average of 46.13 at Time One to 47.69 at Time Three. The implication

of this is that learners have been expanding their capacity to produce more information (more subordinate clauses) in a concentrated way (fewer C-units). This reflects an improvement in establishing more condensed and deeper levels of communication.

Twelve participants have obtained gain scores between 21.5% and 147.8%. Seven of those subjects have obained particularly high scores ranging over 61%. Two subjects present declining scores within a 10% range from T1 to T3.

COMPLEXITY SCORES : NARRATIONS 1, 2 , & 3

		COMPLEXITY						Scores			Gain Scores
	Subject Id	C-Units			Nº Clauses						
		T1	T2	T3	T1	T2	T3	T1	T2	T3	%
1	Giovanna	26	13	15	72	39	56	2,77	3,00	3,73	34.66
2	Elif	15	15	10	40	40	55	2,67	2,67	5,50	106.0
3	Charo	16	9	*18*	65	45	83	4,06	5,00	4,61	13.54
4	Mujgan	20	9	9	64	43	33	3,20	4,78	3,67	14.68
5	Serico	*9*	*16*	*14*	18	52	34	2,00	3,25	2,43	21.5
6	Marcela	14	9	15	50	28	48	3,57	3,11	3,20	*-10.36*
7	Johann	20	16	7	62	53	35	3,10	3,31	5,00	61.29
8	Daniel	*10*	*13*	9	30	36	49	3,00	2,77	5,44	81.33
9	Cecille	22	13	10	80	68	50	3,64	5,23	5,00	37.36
10	Maria	*10*	*14*	10	23	44	57	2,30	3,14	5,70	147.82
11	Mauro	12	8	11	59	34	49	4,92	4,25	4,45	*- 9.55*
12	José	*9*	*11*	6	32	41	37	3,56	3,73	6,17	73.31
13	Inalda	6	5	*9*	23	25	51	3,83	5,00	5,67	48.04
14	Ozgul	9	5	2	35	33	18	3,89	6,60	9,00	131.36
15	Rosa	*11*	*13*	12	44	55	71	4,00	4,23	5,92	48.0
16	Elana	14	12	6	41	33	37	2,93	2,75	6,17	110.58
	MeanScores	13.94	11.31	10.19	46.13	41.81	47.69	3,34	3.93	5.10	**52.69**

Table 7.5 : Complexity Scores for Narration Tasks over time

Individual learner performance presents four groups of similar graded improvement. The first group formed by Elif (106%),Elana (110%) Ozgul (131%) and María (147%) shares the highest gain scores in complexity overtime. The second group in rank is the one formed by Johann, (61%) José, (73%) and Daniel (81%). The third group, which includes Giovanna, (34%) Cecille, (37%) Inalda, and Rosa (both with 48%) obtained gain scores below 50%. In the fourth group, which presented the lower gains are Charo, (13%) Mujgan, (14%) and Serico (21%). Seven subjects whose

gain scores fall within a range between 61.3% and 147.8% represent the highest performance end. The lower performance group includes seven subjects with a range of gain scores between 13.5% and 48%. Only two subjects presented negative gain scores with an estimate of around -10%. The average gain score for the whole group was equivalent to 52.69%.

ACCURACY

The statistics for accuracy may not be as conclusive as those for complexity but still signal interesting trends for progress in the group as a whole. Eleven subjects show a positive gain in accuracy over time. Two have increased their ratio between 4.66 and 7.04 % (grey); four have increased between 12.67% and 17.87% (dark grey);four are between 21.83% and 38.34% (blue), while one has reached 112.32% (red). Five subjects have obtained negative gain scores, four of those, ranging from -2.82% to -8.84% and one with -19.97%. The average gain score in this measure was only 12.27%.

ACCURACY SCORES : NARRATIONS 1, 2 , & 3

		ACCURACY									
	Subject Id	Total Nº Clauses			Error-Free Cls			Ratios			Gains
		T1	T2	T3	T1	T2	T3	T1	T2	T3	%
1	Giovanna	72	39	56	53	28	33	73,6	71,8	58,9	-19.97
2	Elif	40	40	55	29	22	38	72,5	55,0	69,1	- 4.68
3	Charo	65	45	83	44	37	65	67,7	82,2	78,3	15.65
4	Mujgan	64	43	33	38	20	18	59,4	46,5	54,5	-8.24
5	Serico	18	52	34	12	27	21	66,7	51,9	61,8	-7.34
6	Marcela	50	28	48	30	15	33	60,0	53,6	68,8	14.66
7	Johann	62	53	35	48	35	33	77,4	66,0	94,3	21.83
8	Daniel	30	36	49	20	13	35	66,7	36,1	71,4	7.04
9	Cecille	80	68	50	57	52	44	71,3	76,5	88,0	23.42
10	Maria	23	44	57	22	40	53	95,7	90,9	93,0	-2.82
11	Mauro	59	34	49	47	23	44	79,7	67,6	89,8	12.67
12	José	32	41	37	22	31	30	68,8	75,6	81,1	17.87
13	Inalda	23	25	51	15	23	46	65,2	92,0	90,2	38.34
14	Ozgul	35	33	18	11	19	12	31,4	57,6	66,7	112.42
15	Rosa	44	55	71	27	49	59	61,4	89,1	83,1	35.34
16	Elana	41	33	37	36	29	34	87,8	87,9	91,9	4.66
Mean Scores		46.13	41.81	47.69	31.94	28.94	37.38	69.07	68.77	77.55	**12.27**

Table 7.6 : Accuracy Scores for Narration Tasks over time

A quick contrastive look at the score gains obtained in complexity and accuracy reveals that fifty percent of the group obtained significantly high gain scores in complexity but much lower score gains in accuracy. This is illustrated by the cases of Giovanna (36.7/-19.8); Elif (106/-4.6); Johann (61.3/21.3); Daniel (81.3/7.04); María (147/-2.8); Jose (73.3/17.8); Rosa (48/15.6); and Elana 110/4.6).

	Compl	Acc		Compl	Acc		Compl	Acc		Compl	Acc
Giovanna	36.7	-19.8	Serico	21.5	- 7.3	Cecille	37.3	23.4	Inalda	48.4	38.3
Elif	106.0	- 4.6	Marcela	- 10.3	14.6	María	147.8	- 2.8	Ozgul	131.3	112.4
Charo	13.5	15.6	Johann	61.3	21.3	Mauro	- 9.5	12.6	Rosa	48.0	15.6
Mujgan	14.6	- 8.2	Daniel	81.3	7.04	José	73.3	17.8	Elana	110.5	4.6

7.7 Comparative gain scores between Complexity and Accuracy

But even in the cases of lower distance between complexity and accuracy score gains such as Cecille (37.3/23,4); Inalda (48.4/38.3); Serico (21.5/ -7.3); Mujgan (14.6/ -8.2) there is still an interesting gain gap which validates the trade-off effect hypothesis of less accuracy in favour of more complexity. A surprising individual case is Ozgul's, whose scores indicate high values for both complexity and accuracy (131.3 / 112.4). In contrast, the negative scores for loss of complexity overtime for Marcela (-10.3/ 14.6) and Mauro (-9.5 /12.6) speak in favour of gains in accuracy.

Several interesting factors could account for the results obtained in the gain scores for complexity (52.69%) as opposed to the total average for accuracy (12.27%). The fact that there were lower accuracy scores implies that there was less focus on form in the narrative tasks. This might be related to risk-taking attitudes on the part of some learners when dealing with event-sequencing. Another important factor which might account for less accuracy in performance is that in the final evaluation of the outcome, learners tend to use more extemporaneous speech, a circumstance which allows for less careful language use.

FLUENCY

It has been argued (Skehan,1998) that fluency reflects the learner's choice for prioritising meaning over form and his/her capacity to cope with on-line communication. Fluency measures are used to assess the capacity to engage in sustained performance. This measure interacts with the previously discussed variables of accuracy and complexity in interesting ways.

The results obtained with fluency show some relevant mean scores (Table 7.8 below) and pertinent individual scores (Table 7.9). An interestingly mixed picture emerges from the analysis of the group performance. There seems to be a slight tendency in favour of more pausing overtime, although pause length appears to diminish altogether with a reduction of false starts at T2 and a slight increase at T3.

OVERALL NARRATIVE FLUENCY SCORES

Times One, Two and Three

	Nº Pauses	Pause Length	Replacement	False Starts	Reformulation	Repetitions
T1	9.56	13.75	1.69	1.13	12.88	3.88
T2	9.13	11.94	1.25	.88	14.06	2.50
T3	9.84	12.38	2.06	1.06	13.13	3.75

Table 7.8 : Total Fluency Scores for Narrations 1, 2 & 3

Parallel to this scenario, there is a small decline of replacement scores at T2 with a marked increase at T3, while reformulations follow the reverse pattern with false starts. The more false starts , the fewer reformulations , and viceversa. This circumstance may reflect a typical tendency for self-correction, also present in the analysis of description values, aiming at more accuracy. This trend is concomitant with the fact that the accuracy ratios also tend to show a progression overtime.

From the analysis of performance at the individual level we can see that the number of pauses is reduced over time in six cases, increases in seven cases and remains constant in three cases. Pausing time clearly

increases only in five cases , remains more or less constant in five and decreases significantly in six cases.

THE STATISTICS OF FLUENCY OVER TIME

NARRATION	FLUENCY 1-2 & 3																	
	NºPauses			Pausing ss			Replace			*False Starts*			Reforms			Repets		
Subject Ident	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
Giovanna .	16	8	14	23	12	20	1	2	0	1	0	0	9	9	6	0	3	3
Elif *	8	7	16	11	10	27	1	1	1	0	0	0	4	8	6	4	2	7
Charo *	7	7	9	8	7	10	3	1	2	0	0	4	15	15	20	1	1	1
Mujgan -	11	11	1	18	18	2	1	2	0	1	1	1	20	20	14	6	6	6
Serico *	3	27	11	6	37	17	1	0	2	1	0	2	6	19	12	1	2	4
Marcela	8	8	10	15	9	14	1	0	3	3	1	2	18	12	16	4	0	4
Johann -	21	11	12	32	14	15	1	1	4	2	1	0	17	10	3	6	3	0
Daniel *	5	14	15	9	19	23	1	3	6	2	1	0	13	7	12	2	0	5
Cecille -	14	9	5	17	9	5	2	1	2	1	1	2	11	15	7	6	1	2
Maria *	2	1	7	2	1	9	1	0	4	0	1	1	7	10	27	1	4	6
Mauro	7	12	10	11	12	11	0	5	4	2	2	0	20	15	18	5	4	3
José -	7	11	2	7	15	2	4	0	0	0	0	1	14	31	7	2	5	1
Inalda	8	3	12	14	4	13	1	0	1	1	3	1	7	14	13	5	1	9
Ozgul -	20	10	7	29	17	8	6	1	0	2	0	0	14	10	7	3	2	3
Rosa *	9	5	13	10	5	13	2	1	4	2	2	3	18	20	33	11	6	4
Elana	7	2	7	8	2	9	1	2	0	0	1	0	13	10	9	5	0	2
Mean																		

Table 7.9 Individual Fluency Scores for Narration 1, 2 & 3

The most interesting values in Table 7.9 are related to reformulations which individual subjects present overtime. Three subjects (Serico, Inalda and Rosa) have practically doubled the amount of reformulations in their performance from T1 to T3, while María has gone up from seven reformulations at T1 to twenty seven at T3.

Transactional Language Use

We can see from the analysis of Table 7.10 below, that narration tasks have generated consistent transactional language use, which is essential , as established in the narrative framework, for accomplishing the narrative task successfully. There is a steady increase in the proportion of total clauses which are transactional from Time One (71.20%) to Time Two

(79.28%). This increase is sustained with a slight variation in Time Three where it peaks to 80.12%.

Fifty percent of the sample presents a relatively balanced performance of transactional language use with an increase that ranges between 0.1 to 19.6%. Three students show a dramatical switch from more interactional language use, which reveals more involvement with socializing language, in Time One, to more transactional language use, which involves strictly narrative information, in Times Two and Three.

TRANSACTIONAL INTERACTIONAL SCORES : Narrations 1, 2 & 3

		Total Clauses			TRANSACT Cls			NºCls/Tran Ratios			INTERACT Cls.			NºCls/Inter Ratios		
		T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
1	Giovanna	72	39	56	58	18	33	80,6	46,2	73,2	14	21	15	19,4	53,8	26,8
2	Elif	40	40	55	28	23	38	70,0	57,5	67,3	12	17	18	30,0	42,5	32,7
3	Charo	65	45	83	46	36	65	70,8	80,0	83,1	19	9	24	29,2	20,0	28,9
4	Mujgan	64	43	33	27	35	18	42,2	81,4	84,8	37	8	5	57,8	18,6	15,2
5	Serico	18	52	34	15	37	21	83,3	71,2	88,2	3	15	4	16,7	28,8	11,8
6	Marcela	50	28	48	35	18	33	70,0	64,3	89,6	15	10	5	30,0	35,7	10,4
7	Johann	62	53	35	49	45	33	79,0	84,9	71,4	13	8	10	21,0	15,1	28,6
8	Daniel	30	36	49	5	32	35	16,7	88,9	61,2	25	4	19	~~83,3~~	11,1	38,8
9	Cecille	80	68	50	60	58	44	75,0	85,3	70,0	20	10	15	25,0	14,7	30,0
10	Maria	23	44	57	22	41	53	95,7	93,2	71,9	1	3	16	4,3	6,8	28,1
11	Mauro	59	34	49	48	28	44	81,4	82,4	81,6	11	6	9	18,6	17,6	18,4
12	José	32	41	37	14	37	30	43,8	90,2	94,6	18	4	2	56,3	9,8	5,4
13	Inalda	23	25	51	20	22	46	87,0	88,0	92,2	3	3	4	13,0	12,0	7,8
14	Ozgul	35	33	18	33	29	12	94,3	87,9	94,4	2	4	1	5,7	12,1	5,6
15	Rosa	44	55	71	39	52	59	88,6	94,5	88,7	5	3	8	11,4	5,5	11,3
16	Elana	41	33	37	25	24	34	61,0	72,7	70,3	16	9	11	39,0	27,3	29,7
MEANS		46.13	41.81	47.69	32,75	33.44	37.94	71.20	79,28	80,17	13.38	8.39	10.38	28.80	20,72	20,58

Table 7.10: Transactional and Interactional Scores for Narration Tasks over time

Daniel illustrates the most significant switch in this group, from 16.7% of transactional use in Time One to 61.2 % in Time Three. The two other learners, Mujgan and José, on similar terms, have increased the use of transactional language from 42.2% and 43.8%, respectively, at Time One to 84.8% and 94.6% at Time Three. The remaining five students in the group have reduced their transactional use , which ranges between 70% and 95% in Time One to a range between 67.3% and 73.2% in Time Three. The reduction of transactional scores overtime in one third of the

group is not particularly significant in terms of a successful performance, considering that the mean scores for the narrative task were above 70%.

Comparison of Findings

The analysis of complexity gain scores reveals that there seems to be a consistent trend for greater complexity overtime in fourteen subjects. Nine of those fourteen subjects have also consistently made an improvement in transactional language scores. There seems to be, then, some parallel progression in those learners who present a modulated attempt to reformulate their syntactic resources by making interlanguage more complex and tailoring communicative efforts towards effective language communication. Interestingly enough, eleven subjects have also improved their accuracy scores overtime.

		Complexity Scores			Accuracy Ratios			Transactional Ratios			Interactional Ratios		
		T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
1	Giovanna	2,77	3,00	3,73	73,6	71,8	58,9	80,6	46,2	73,2	19,4	53,8	26,8
2	Elif	2,67	2,67	5,50	72,5	55,0	69,1	70,0	57,5	67,3	30,0	42,5	32,7
3	Charo	4,06	5,00	4,61	67,7	82,2	78,3	70,8	80,0	83,1	29,2	20,0	28,9
4	Mujgan	3,20	4,78	3,67	59,4	46,5	54,5	42,2	81,4	84,8	57,8	18,6	15,2
5	Serico	2,00	3,25	2,43	66,7	51,9	61,8	83,3	71,2	88,2	16,7	28,8	11,8
6	Marcela	3,57	3,11	3,20	60,0	53,6	68,8	70,0	64,3	89,6	30,0	35,7	10,4
7	Johann	3,10	3,31	5,00	77,4	66,0	94,3	79,0	84,9	71,4	21,0	15,1	28,6
8	Daniel	3,00	2,77	5,44	66,7	36,1	71,4	16,7	88,9	61,2	83,3	11,1	38,8
9	Cecille	3,64	5,23	5,00	71,3	76,5	88,0	75,0	85,3	70,0	25,0	14,7	30,0
10	Maria	2,30	3,14	5,70	95,7	90,9	93,0	95,7	93,2	71,9	4,3	6,8	28,1
11	Mauro	4,92	4,25	4,45	79,7	67,6	89,8	81,4	82,4	81,6	18,6	17,6	18,4
12	José	3,56	3,73	6,17	68,8	75,6	81,1	43,8	90,2	94,6	56,3	9,8	5,4
13	Inalda	3,83	5,00	5,67	65,2	92,0	90,2	87,0	88,0	92,2	13,0	12,0	7,8
14	Ozgul	3,89	6,60	9,00	31,4	57,6	66,7	94,3	87,9	94,4	5,7	12,1	5,6
15	Rosa	4,00	4,23	5,92	61,4	89,1	83,1	88,6	94,5	88,7	11,4	5,5	11,3
16	Elana	2,93	2,75	6,17	87,8	87,9	91,9	61,0	72,7	70,3	39,0	27,3	29,7
MEANS		*3,34*	*3.93*	*5.10*	*69.07*	*68.77*	*77.55*	71.20	79,28	80,17	28.80	20,72	20,58

Table 7.11: Contrastive Values for Complexity,Accuracy and Transactional Scores in Narratives

If the results obtained for the narrative tasks are contrasted with the results from the descriptive tasks, some immediate observations could be made from the overall analysis of the mean scores of both task types charted in Table 7.12 below. Firstly, there is a consistent move towards complexity in both task types with a stronger pace in narrative tasks.

Secondly, although the accuracy ratios tend to increase in a more constrained way with a higher degree of accuracy in descriptive tasks, the progression of accuracy improvement overtime is higher in narrative tasks.

	Complexity Scores			Accuracy Ratios			Transactional Ratios			Interactional Ratios		
Task	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
Description	*3,14*	*3,38*	*3,67*	*76,64*	*75,42*	*79,50*	*57,21*	*59,45*	*65,85*	*42,79*	*40,55*	*34,15*
Narration	3,34	3.93	5.10	69.07	68.77	77.55	71.20	79,28	80,17	28.80	20,72	20,58

Table 7.12 Mean Scores for Description and Narration Overtime

The progression of improvement in transactional language use seems to be at a similar pace in both task types with perceptibly higher values in the narratives. This is an indication that the learners were much more connected with the language pertinent to the task rather than engaging in specific comments which were not directly relevant to the narrative events.

Transactional language use tends to improve almost inevitably as time goes on. The transactional/interactional ratios reveal that there is more transactional speech as percentage of the group as a whole overtime, a circumstance which might be indicative of the learners' move towards more effective control of task rhetorical requirements for more successful results.

Despite the fact that learners are producing significantly more complex , more accurate language and function transactionally in an interesting progressive trend overtime, the more representative scores for fluency in Table 7.12 , reflect only a limited increase of fluency factors. This implies that learners' attitude towards a fluent performance on the whole is quite discrete. Results in Narration Time Two seem to break the significance of values to be supportive of some trends, but, if we still contrast specific values in Time One in relation to Time Three, the analysis lends itself towards more fluency and more casual interlanguage variation, which seems typical in narratives.

FLUENCY SCORES

FLUENCY	Pauses	Pausing	Replace	False Starts	Reforms	Repets
Subject Ident	T1 –T3	T1 –T3	T1 –T3	T1 –T3	T1 –T3	T1 –T3
Giovanna .	+2	-3	-1	-1	-3	+3
Elif *	+8	+16	0	0	+2	+3
Charo *	+2	+2	-1	+4	+5	0
Mujgan -	-10	-16	-1	0	-6	0
Serico *	+8	+11	+1	+1	+6	+3
Marcela	+2	-1	+2	-1	+2	0
Johann -	-9	-17	+1	-2	-14	0
Daniel *	+10	+14	+5	-2	-1	+3
Cecille -	-9	-12	0	+1	-4	-4
Maria *	+5	+7	+3	+1	+20	+5
Mauro	+3	0	+4	-2	+2	-2
José -	-5	-5	-4	+1	-7	+1
Inalda	+4	-1	0	0	+6	+4
Ozgul -	-13	-21	-6	-2	-7	0
Rosa *	+4	+3	+2	+1	+15	-7
Elana	0	+1	-1	0	-4	-3

Table 7.13 Progression of fluency raw scores overtime

Narratives typically render a more monological style than the other two tasks researched in this work. This discoursive mode seems to require longer streches of language output for an effective performance. As a result of this circumstance, interlocutors remain silent for slightly longer periods as well. This may generate a reduction of production time in some subjects . On the other hand, the same situation of more extended turns, allows for better concentration and planning which tends to favour more complex language use.

A QUALITATIVE PERSPECTIVE OF LEARNERS' PERFORMANCE

Language Use in Narrative Tasks

The purpose of the following sections of this chapter is to provide a qualitative assessment of the learners' differing focus during performance. The analysis will target : the use of transactional vs. interactional language, which must be framed within the cognitive demands imposed by the

narrative tasks; the learners' decisions to put meanings across in terms of more attention to form vs. meaning ; and the potential evidence of common core strategic resources to cope with communication problems across the narrative tasks. The emerging picture will be a useful parameter for assessing potential intertask variation and learner progress.

Handling Narrative Structure and Story Telling

The qualitative analysis of the narrative task is based on two important factors : (a) the narrator's resources and (b) the narrator's perspective.

The first factor implies the learner's coding resources and communicative skills for interpreting the narrative sequence and structuring the story. These abilities depend on the range of psycholinguistic and cognitive processing abilities present in speakers to cope with comprehension and production.. They involve individual skills to determine communicative goals, assess communicative resources, plan and execute communication (Bachman and Palmer,1996). The learners must activate their underlying competence, tune up their background knowledge and map them onto the specific narrative contexts they are coping with. Picture stories, such as those implemented for this research, demand from subjects the ability to recognise or project a pattern which will serve as an organizational framework to convert the visual representation of the picture story into verbalization.

The narrator must perceive the episodes which constitute the narrative sequence. An episode is first of all conceived as a part of the whole narrative structure, having a beginning and an end. This idea of episode corresponds with the articulation of a sequence of sentences denoting the actions and events of such episode. This intuitive notion of episode, as a "conceptual unit", has been adopted in the theory of discourse to be applied primarily to discourse types such as stories (Van Dijk,1979).

The second factor is probably more aptitudinal in nature and concerns levels of analytic abilities in story-tellers and their capacity of involvement with the story plot. It presupposes the articulation of narrative devices and strategic resources for enhancing and shaping the plot .Some narrators will say more than they actually see. In this sense, they will be *creating a fictional world* with inferences, feelings, judgements, ideas, the fruit of their imagination, all of which implies developing a more elaborate version of the basic story. Other narrators will take *a more realistic perspective*, less daring and risk-taking for the purposes of interpretation of the state of affairs.

Probably one important aspect of the narrator's perspective is related to the idea that narratives are often "performances", in the sense that they present "involvement" and "dramatization". This factor corresponds to a more sociolinguistic approach related to the shaping and steering of the story to render either a more objective evaluation or a more "dramatized" version of the narrative development (Toolan,2001). This point of view seems to have firstly emerged in the works of Hymes and Goffman and received fuller attention in Wolfson (1981). To perform a story implies exploiting special features as resources for highlighting the story's main points. Wolfson has particularly singled out the following aspects: direct speech, repetition, expressive sounds, motions and gestures, and tense-shifting from conversational historic present to past tense.

These considerations concerning the narrator's perspective contribute to provide a different angle, embedded in the complex organization of story-telling.

The Transactional Factor

An essential point was made about narrative tasks at the beginning of this chapter in establishing a template of the ideal stages implicit in any story. Despite the apparent freedom for combining information into a coherent narrative discourse, there is an underlying structure which story

tellers must control. Events take place in a setting, where a cast of characters, over a particular time, get involved in specific circumstances in which things happen. In structural terms, the basic categories involved for instantiating the narrative discourse are: a) scene setting, to mark episodes; b) problem development, to refer characters and the succession of events over time; and c) resolution, to provide the outcome of the story . Control over these elements, which are the building blocks of the narrative structure, is essential for story-tellers to reach their goal. The analysis of such framework will be made in the context of the narrator's resources and the narrator's perspective.

Narrative One: **The Envelope**

(a) ***The coding resources of narrators and their perception of events .***

Depending on the narrators' coding resources and their perception of events, there will be more or fewer details embedded into a story. (Yorio,1980) Narrators with limited linguistic resources may decide to sacrifice accuracy for the sake of making themselves understood. This strategic move is related to the principle of clarity and economy (Poulisse, 1997).

The establishment of an identifiable setting gives the interlocutor information about where people are, and provides clear spatiotemporal indications of where and when things happen. The sequence of events involves changes which affect individual characters with whom the interlocutors sympathize or identify. Characters are found in concrete places and involve in activities at specific moments. The narrator should deal with these elements clearly. Learners cope with these narrative aspects via several strategic resources.

Formally the core elements in narratives are characterised by certain basic syntactic devices such as the 'referentially' ordered use of verb forms to refer the temporally ordered state of affairs and events.

This first sample illustrates a well-structured setting which properly projects the typical atmosphere of a French café.

Excerpt 7.1 Effective scene- setting

Giov: ...sitting eeh outside a bar ..in a brasserie..
/E: uhumm! /
..there is ***a man*** (1.0)...
suddenly..***another man*** (2.0)..eeh get..nearr him /E:yes/ annnd ..ask (h)im .if.uuh (1.0) ..per..accident... he lost a wallet.
and.. ***the young man***.. who is sitting..aah..**(2.0)** *on the table*..near the table . .uuh **(2.0)** /E: yes../
tell ***the other man***...thaatt the wallet..is really-y **(1.5)** ..(h)is..

The narrator uses seven specific verbal forms, prepositional phrases, and reduced noun phrases to circumscribe referential information. The use of a participial phrase at the very beginning of the narrative, "*sitting outside..a bar ..in a brasserie .. there is a man*", provides the most appropiate form to encapsulate aspects such as circumstance, place and character in an economical way. The introduction of the adverbial "*suddenly*" marks the shift for the appearance of the second character, well contrasted by "*another man*". There is tense variety and reasonable accuracy in the use of tenses. The use of clauses allows for discoursive expansion and clarification.

Narrators with more limited coding resources are able to handle scene setting with the basic verb forms for signalling events, a strategic use of articles with noun phrases for keeping character reference clear, and a few prepositional phrases to mark location.

Excerpt 7.2: Basic coding devices for scene-setting

Muj::a young man stays...eeh...in the coffee.../R: ..where...? / coffee..in this history../R:..yes!/and..eeh..eeh..other(1.0)..other man.. approach approach to him and he aske...eeh young..young man eeh..excuse me,did you lose your wallet ?.. / R: your wallet..? /wallet..and he answer to him.."yes, tenk you very much.I lost it."

This version has a more reduced number of verb forms with one prepositional place to centre the scene in the coffee shop and a very brief reference to characters, "a young man" and "another man", all of which

accounts for extremely simple resources. The use of direct speech in the presence of coding limitations has been instrumental as a simplification strategy to generate more processing space.

Communicative pressure conditions less-articulate speakers to a very basic control of the narrative structure. Repetitions or replacements are productive resources to generate clarity and economy, two essential factors which help relieve part of that pressure. The following example illustrates a schematic version of character reference and event sequencing. The use of time markers such as 'then' and 'suddenly' provides a more manageable framework for chaining events. The reformulation of references for place and event and the use of verb and tense variety, reveal more resources at stake here than in the previous version.

Excerpt 7.3 : Character reference and event-sequencing

Mar:.this...eeh..one man is ..is in ...eeh..in a..pub...but..outside the pub...
and then..thee..(2.0) he..is..eeh waiting for someone...and..(2.0).. and then..thee..
suddenly one man comes...and ask..talk..him...is eeh ..'have have you lost..ssome
wallet.. you..know..wallet?

Sometimes a narrator adequately intersperses tenses for highlighting events, and switches from indirect to direct speech to furnish one's addresses with a more vivid account of the situation.

Excerpt 7.4: Strategies for highlighting event-sequencing

a) *Ch* : there *is a young man in a..in a coffee shop*, then eh a man
older than him *came* to say eeh (1.0)..."*I've found eeh.. this.. this is your wallet*
and eh and the young man say "*yes I've lost my..my wallet*"

Limited coding resources can be extended to provide a reasonably detailed and effective narration as in the following sample.

b) *Oz: I want to describe.. a little story /J:OK./ this place..uh.. .a little uh café..*
I think so..uh in the.. in..the france.. took place.. in the.. france..
one uh..young man..uh…lost..uh him wallet < and uh he stay…and maybe
he's a little bit.. something.. maybe he's a little bit tired.>.and.. another
man..uh come..come uh.. near.. and ask her uh.. "excuse.. me uh..is is it your
wallet..?"

he..uh very happy.. because.. he think uh...forget..uh he think..lost..uh it../

Despite the lack of accuracy, the provision of redundant information "*this place..a little café" –"in the france ..took place in the france"* furnishes an adequate setting. Characters are clearly distinguished with simple means, the use of the adjective 'young', and proper deictic marking with 'another'. Evaluative adjectives are used to indicate mental states and change of mood in the young man, from "tiredness" to "happiness" which we infer is for recovering his wallet, all of which enhances the narrator's performance.

Some narrators seem to resort to reduced syntactic forms to make activity more central in the narrative and facilitate clear event sequencing.

c) *Mau: uuh..**this story is about uh a man (2.0).. this man..uh..(1.0) lost.. lose** your**- wallet.. in front of a restaurant.. (1.0)***
*aa-and **(1.0)**.. somebody.. found his wallet ..*

More limited coding resources take narrators only to the very basic state of affairs which provides a limited introductory scene setting. There is a very reduced version of a young man in a place which can be identified as being in a coffee shop. There is no expansion of details and the lack of adjectives or relative clauses implicitly reveals that the narrator might not want to overload her version with complex structures.

Excerpt 7.5: Limited coding resources

a) *Eli: the..situation is in the France*. and ..eeh..during the day..eeh..
*one man..is,..in the coffee..*and..*he..had..a eeh..(2.0)another person...*and *they ..tttalk about ..something*...eeh..and *then they..eeh..**they like each other.***

b) Interlocutor:: aah, yes, because now really now, *I don't know how many people are in the back*. I mean at the beginning when the young man and...

Muj: ***a young man*...sitting into..in a coffee in the street** and ***adult man*** approached him /Ch.:hmm/ and **he** aske eh him..eeh..did you lost your wallet ? and ssh.. he answered him yes I did I lost it...

The interlocutor's clarification check in 7.5b has forced the narrator to reorganise her speech. This intervention becomes a positive element for the narrator to try to reformulate the problematic version. In the previous exchange, the narrator must introduce a participial clause to expand the referent "a young man" into "a young man sitting ..in a coffee in the street". Despite the error of using "in a coffee" to mean "in the coffee shop", the mistake is covered by the rest of the expression which renders "a coffee in the street ", interpreted as "a coffee place in the street".

As the narrator continues to reformulate her narrative she maintains the strategy of expanding the referent "young man" but this time (in 7.6) with a full relative clause "who was staying in the coffee".

Excerpt 7.6: Positive effect of clarification checks

Interlocutor: (now she interrupts more confidently) yes until there I could eeh...

Muj: aand ***after a young man*** *who is..***who was staying in the coffee***.(3)..:/Interlocutor: aah, and then...the same man who lost..theeee.. wallet

Narrator: same man, same man.. who lost a..he..he lost..a...

Interlocutor ...the wallet.

Two interesting points could be inferred from these exchanges. The narrator is aware of the fact that proper character identification may be achieved via expansion of the main noun form. It can also be inferred that the narrator is aware of the formal ways of expanding the referent for clarification, either by means of participial phrases, which are a reduced version of relative clauses or by relative clauses themselves. The narrator's attempt to continue with this "expansion" strategy until the end of the exchange reveals her acknowledgement of its effectiveness.

Character identification, location/time shift, and logical event-sequencing are factors which affect the narrator's coding resources because these elements are heavily intertwined and failure in the proper handling of one of them has a negative imbalancing effect on the others. If reference to characters is ambiguous and there is no clear marking in

relation to the shift of location and event sequencing the interlocutor is unable to follow the story.

Event sequencing implies a chaining of events through temporally ordered clauses, cause-effect relations or a succession of actions supported by a motive or "purpose". Narrators are aware of the importance of event-sequencing for telling the story. The excerpts below show how some narrators cope to provide the required connectedness of stages or moves involved in event-sequencing.

Excerpt 7.7: Chaining of events

a) *I: uuh..this story is about uh a young man* ***..this man..uh.. lost..*** *lose* <u>your</u>- ***wallet.. in front of a restaurant..*** *aa-and ..* ***somebody.. found <u>his</u> wallet ..*** *.. and.. the other... please..uh..uh.." please uh uh.. send..this envelope.. take this envelop"*

and uh .. the young man ***..take this envelope*** anndd .get.on
a..***get in a van..annnd..goes to dover***..because eh..dover
/L:ah..yes/***because he's going on holiday to England*** ...yeah ? /L:huhumm/
*in dover ..yes.. uh..****when the customer.. ask..*** *"what is this"...*
the customer found something wrong..in the envelope.. *like* ***heroin..***

b) *G* :uh..**when they pass..** thee ...aah I don't know...no,it's not frontier..the-ee frontier**.. the frontier in dover**...
of course...the police..ask(h)im */E:yes/..**if..(h)e (h)as something to declare**
.and..he (h)as ..(h)is wallet a-and ..into his (h)andsack.. */E: I see../*.
..**inside..the-ee ..not..nothing to declare**...but..**the police (h)ad a look**... at the wallet..**he wanted to see..what..was in...** /E: uhumm./ ..and was **heroin.**
/E:I see...it was terrible..and what did he do?..do you know?/
no..because **I think..they..take (h)im ..to the prison.**

In Excerpt 7.7a , the narrator provides a very clear sequence of stages which is characterized by short sentences with tense and speech-shifting at proper places. The narrator opts for the present tense to unfold the story line as shown in the pictures but shifts to the past tense to refer retrospective events which are inferred from the immediate developments such as the loss and the finding of the wallet. The use of direct speech at crucial points adds vividness to the narrative.

In Excerpt 7.7b, meanings are retrievable because event-sequencing has been properly instantiated in spite of the wrong use of vocabulary items, as happens in this case with the term "wallet", instead of 'envelope', "handsack" for 'handbag' and "police" for 'customs officer'. The narrator's command of tenses allows for clarity in the sequencing and the temporal order of events.

Clarity in establishing event-sequencing allows narrators the possiblity of providing the core elements of the narrative schema. This circumstance is not always a matter of good command of linguistic resources but rather good communicative resources. In Excerpt 7.8 below, the narrators are able to establish a clear chain of events from beginning to end through a sequence of short utterances, which would otherwise appear as dispersed.

Excerpt 7.8 Temporarily-ordered clauses and repetitions

a) Oz: *and after* ***young man bring the packet.. and uh carry.. the packet*** *...he's come with* ***hovercraft.. with hovercraft.. ..in the.. Dover..*** *I think so.. I don't know exactly where is the place.. and uh.. after this place uh).. him..* ***the man..he needed any declare..declaration..*** *you know..* ***in the customs../J:aah/*** *looking for/Jo:* ah.. so **the customs** had problems with the packet.. */O:yes they pass-ed....* ***they want pass uh the customer.. in frontier..*** *in the frontier uh.. but ..* ***customer*** *.. ask him..* ***uh what is this.. the packet.. may I.. look in this one..*** *- the young man.. told.. yes of course..* *and uh* ***after the customer.. opened the packet*** *.. a-and uh .. inside a lot of..* ***pushed it..a little bit of the packet****.. and customer asked him .*

this look likes heroin!.

b) J:*and zen he gets his wallet..and then he drives to... dover.. ..go over the channel.. canal. to drive to..to the customs.. customs..yeah*

The interlocking of clauses allows interlocutors to infer sequence of events and ensures the description of circumstances surrounding those events. Cohesion is also maintained via repetition.

The basic discoursive support for story telling is centred on a consistent interspersing of tense forms together with proper use of direct vs. indirect speech. Character identification, location shift and logical sequencing should be tied up together. Narrators who intuitively put their resources at the service of making these elements accesible for the

interlocutor from the very beginning will succeed in telling their story. The most effective strategies used are reiteration of structures where important markers are required for cast change, location and time shift together with expansion of references. Event sequencing is effectively supported by interlocking clauses which transmit cause-effect relations directed towards motive or "purpose" of activity. Besides these crucial resources, learners seem to offer very specific stylistic variations which enhance their stories in interesting ways. This is the topic of the following discussion.

(b)The narrator's perspective

A narrative is never without contexts. In this particular perspective the contexts are shaped by the way in which the story is told and heard. The story-teller and the addressee of a narrative may assume quite different grounds for a particular story being told, and may separately deduce different morals or consequences. This circumstance happens because narratives, invariably carry a glimpse of the worlds they represent, which inevitably triggers a point of view in the story-teller and in the interlocutor.

Stories give participants the opportunity to share experiences and to display agreement and common perceptions, but they also give grounds for differing and even clashing assumptions about "politically" different perceptions of the contexts and contents. Narratives involve a combination of representations of the world and reactions to those events. Narrators may tell us about *what happened* but they also may refer *how they feel about it.* (Eggins & Slade,1997). Typical narrators probably get "more emotionally involved" with their story. This is an attitude or a convention to provide some sort of *a dramatic tone* which also carries political and ideological freight. It is the atmosphere created with specific details related to the events that provides the involvement and the ideological touch of this narrative-style. Some narrators get more involved than others. Some performances appear to be more objective by establishing a more impersonal tone, eschewing opinion or personal evaluation.

Some characteristic features of the narrator's involvement

When a narrator tells a story, there will be various actions and events involving characters which constitute the bare facts of the narrative schema and concern the physically overt circumstances observed by any careful witness. These are the Pure Narrative sentences and they provide the core structure for the story.

Although some people stay aloof from a subjective evaluation of character behaviour, the narrative plot, actions and developments, comments such as if characters are nervous, an atmosphere is strange, or events are unhappy or felicitous, are necessarily made to provide an evaluative framework to the story. 'Involved' narrators make their stories more "experiencially" engaged.

The three stories projected for this study presented nine pictures in a succession suggesting a story line with very few captions to lead-in the narrative. This condition left a lot of open space for interpretation and elucubration about characters and events on the part of narrators.

Enhancing character description. Is one typical manifestation of involved narration.

Excerpt 7.9: Enhancing character appearance

a) **C**:*uh* ***a*** *second man.....****look more older****..and eh..* ***with a jacket.. serious****..you know.uh..****(1.0)*** *yeah serious..more than the younger one..* ***with glasses..suit*** *and../ M: very smart../*

The narrator characterises the appearance of the man who found the wallet. Then she concatenates a sequence of adjectives which emphasise subjective perceptions for delineating a more mature (older) , business-like (with a suit), confident (serious) character. These narrative "touches" generally involve interlocutors with personal remarks such as "very smart", which reveal aspects of the effect of the narrator's style The option for this

sort of framework applies a slowing of pace to the narrative but enhances specific details adding colour to the story and engaging the interlocutor.

b) **O:** *one uh..young man..uh..**(1.0)** lost..uh **(1.0)** him wallet/I:his wallet/ wallet. and uh **(1.0)** he stay..and maybe he's a little bit.. something.. maybe **he's a little bit tired**..and.. another man..uh come..come uh.. near.. and ask her uh..(2.0)* **excuse.. me uh..is is it your wallet?**
*..**he..is very happy**.. because*
*(1.0).. he think uh **(1.0)**..forget..uh he think..lost..uh it../*

One simple linguistic feature which prominently marks narratorial thoughts and the character's speech representation are *indirect and direct speech.* On general lines, the choice of one over the other, for narrators, seems to lie on the intention of proximity to the story with indirect speech and proximity to the character with direct speech (Toolan.2001). This characteristic choice of narrator's , which is present in the previous sample, seems to be quite recurrent in the three tasks over time.

The following samples illustrate more directness in the narrative, which is centered on Pure Narrative sentences, a less-involved version from the narrator's perspective.

Excerpt 7.10 : More-direct styles

a) **R**: these is two men..who who met in the **(1.0)**
in the restaurant..and. one of them..is...was sitting *in* the table.. and the other said..did you *lost*.the.. this wallet?..and the other said.. thank you.. this is mine I I *think I lost it..*

b) **M** : *I have here a story.. this is.. they're playing* I'm not sure.. *could play in France.. you know..*
a man lost his wallet *you know..and eh.. he sit behind..uh on a ..at a restau uh by a café..you know..**on uh*** he lost eh.. the wallet *you know..and **a man** finds this again..*

c) ***Mc:** ..this...eeh..one man is ..is in ...eeh..in a..pub...but..outside the pub... and then..thee..(2.0) he..is..eeh waiting for someone...and..(2.0).. and then..thee.. suddenly one man comes...and ask..*talk..*him...is eeh ..'have have you lost..ssome wallet..* you..know..wallet?

The alternation of indirect and direct speech in Excerpts 7.10a and b, is more at the service of the story line than at provoking that interspersing of

a dramatic tone present in the examples showing the more-involved perspective of the narrator.

In the first narrative task, the pictures suggest at the beginning of the story that this envelope was given to the young fellow by an older man at a café in Paris. It is the narrator who has to interpret or articulate the plot as a scene with two smugglers or as a naive young man who accepts a closed envelope without checking its contents.

Excerpt 7.11: More-involved styles

a) *S:.. in the pub..?*
Mc: yeah..in the pub..*iss eeh .....is eeh... / S: ..is a close meeting../*
Mc. yes!.. thas ..thas meeting..is..to-to be
happen..*you know*..

In Excerpt 7.11a The narrator has created a certain atmosphere created by her undertones of "secrecy", which the interlocutor has reacted to. Despite the more limited coding resources of the narrator, she still conveys her point of view.

b) Mau:he said..yeah I *could*..I go back to my country to england you know..the - the other man..you know..who found the wallet ..asked him if he if he could go to England and and bring this packet.***./J: to england?/*** to england..yeah ***/J: eh.. he accepted..to to carry ..the the packet?/*** the packet yeah.. to carry the packet..because..he-ee I must say.. he's not alone..this young man... he's there..with the ..with the girlfriend..uh in in france.. no?. **/J: ah..eeh..he don't asked to the other man..what is it?/**

It is from the interlocutor's reaction and questions in Excerpt 7.11b that we learn that the narrator has rendered a different atmosphere surrounding this first scene at the café. The young man is returning a favour for having recovered his wallet out of honesty from this man who is a total stranger.

c) *C:. you know and then the man.. give him ..thee.. the packets..of..with heroin..but..you can't imagine. this one.. this man because he looks like .. he is very smart .. you can't imagine this one..a man like this.... with heroin..*

In Excerpt 7.7c , the narrator conveys the idea that the young man has gotten into trouble out of naivety, and was actually deceived by first impressions when getting his wallet back from this nicely-groomed man. This is achieved by the forms 'you can't image this man' in parallel fashion.

d) D: *well..I think is this a ..a*
it's a typical deliquent story.. yeah

The interlocutor's evaluation of the story in 7.11d, by labelling it as a delinquent story, is a simple marker of involvement during story-telling.

Another major ingredient of the narrator's involvement in a story is provided by *suspense*. Three pictures out of the set of nine that tell the story suggest the main character's journey to the French border to cross the Channel. None of those pictures would be suspenseful, though they could be interestingly reported. But once the character reached the border, imminent reporting could be expected as to whether the young fellow is stopped or caught, then any delay or elaboration of those final three pictures creates and constitutes the narrator's involvement by providing this major ingredient of narrating, "suspense"(Toolan, 2001).

Narrators make use of various performance features to achieve that characteristic dramatical tone of suspense. Such atmosphere may be created by means of partial repetitions and reformulations. The scene illustrated in Excerpt 7.12 illustrates this point when the party is at the customs and the custom's officer is checking their luggage.

Extract 7.12 : Repetition to achieve suspense

***O**: and through the luggage.. through*
luggage and then..he's looking there..and and
his package.. his french packet..

The *repetition* of "*through the luggage*" followed by "*and then..he's looking there*" creates that delaying effect of an activity in progress such as when customs officers slowly check baggage. A certain degree of

suspense is achieved with the *reformulation* of " *his package*" as .."*his French package*". The rhetorical resource also functions as a reminder for the interlocutor to trace the object back to Paris.

Various other effective strategic devices which are lexical, syntactical or discoursive in origin are brought into play in order to instrumentalise this "emotional" involvement via suspense in story-telling. When narrators perceive important aspects of a situation, they intuitively feel the need to mark these aspects in some easily detectable way.

The provision of words or phrases related to mood or states of mind are lexical devices which contribute to the preparation of an atmosphere of suspense. The ingredient of impatience in the custom officer who is inspecting the baggage, followed by a quick direct question sparkles the scene as an anticipation of the resolution.

Excerpt 7.13: Indirect-direct speech switching

G: *because the man.was. ..looked very impatient..* ***"can I see this packet ?"*** *and among this packet..you can see something really..eeh eh a drug..*

Learners also shift back and forth through time to enhance the narrative atmosphere. We have seen in previous excerpts that a good command of tenses together with a resourceful use of direct and indirect speech at contrastive points of the narrative contributes to provide a more distant narratorial variant or a more character-proximate variant.

Excerpt 7.14 : Switching speech and tenses to create suspense

a) M: the customer !..ask eeh..ask them *eh what is it* ? eh..because eh the young man who was sitting in the coffee eeh..has got a big envelope... / uhumm../ big envelope eeh..and eeh..he asked him *what is it* ?eh. eh he says *"I..I don't know"* and then eeh... ..customer opened the envelope..he...eeh looked.. **heroin**

b) Ch: then, the..they go to the custom *because befo-ore going into the ship you have tooo..to pass the control*...then they.. with the suitcase.. handbag..all the luggage./ ***the young man swears. he's carrying a..an envelope..***

in the...customs office..the officer asks..eeh..they look into the luggage...
and when the officer see the ...envelope...they asked to the man..eh
"what is that?" and then he say *"I don't know..it's just an envelope"..*
then they open the-ee..the envelope the officer..the officer open the envelope
and to find "cocaine"...

c) Mc: and then when he..he..eeh..pass the-e *offices*..cus-customs office*..hm*
they ask him if...he has something to declare and he..says
'no..I haven't anything to declare'
and then pass the policeman... *eh*.. they *regest him.. eh he said the true or
not../S:yeah/*
and then the policeman..eeh..find the packets..and then..the policeman..eh..
he said him..*"that packet..look like uh drugs"*...

The use of some of these very specific language devices serve the narrator as a tool to get involved in the events, and renders a more "passionate" version of the story. This affective and more personal involvement appears to trigger more and better interlanguage output for narratives.

Narrative two

(a) *The coding resources of narrators and their perception of events .*

The second narrative follows essentially the same task framework as in Narrative One. Control over the information structure of the story, makes it easier for the narrator to deal with the state of affairs, character boundaries and the logical sequencing of events.

Learners' performance on a task that requires to distinguish one person from three or four similar people is facilitated by control over a wide range of deictic expressions, relative clauses and therefore production of more complex syntax (Brown,1995;G.Brown et al.,1984). In this story, which is set up in a supermarket, the two female characters who appear at the beginning must be distinguished from a third character, a child who accompanies one of them and another female character appearing in the last scene.

Excerpt 7.15 :Clear character boundaries and event sequencing

a) E: eeh.. I'll tell you.. a story..eeh which izz..eeh..about.. e-eh **shopping**..
a woman...eeh..a young woman.. she intends to go **to a shop**..and she..has a eeh ..a daughter who is..four..years old eh..about four years old ..annnd .. eeh.she has..eh .a shopping lift..shopping lift?../Interlocutor:..I don't know..yes,..but.. / sha-**shopping car**...a small car.. and (stutters) ttt-ake out things..and suddenly she meets..eeh to her frenz..

b) M: yeah..eeh...*some womans..is..the are talking in a ..supermarket..aah.. in front..where.. **the department of wines*** and one child..is..eh..he's playing..
and one child..is..eh..he's playing..aah..***while***..eeh. her mother is..tallking

c) *Mau: one day a housewife.. **(1.0)** go to the supermarket **shopping**.. you know and she saw in this **supermarket** a very good friend you know*
*/J: uhmm/ with..with with uh her children .. **(1.0)** and her children is.uh. in the **trolley**.. you know to the shopping trolley..sitting there and she had uh she had a small chat with her you know.*

d) S: a..ooman..went ..**to the shop**..first..she parked ..parked
the car in the parking.. and went to a shop..and she **start to buy** something..n'..
she saw a friend and start to talking with a friend..jus'..in aaa....near ..the..drinks...**near the drinks**...and th-this friend of her have a child..a girl..hmm.no..no.. could be a boy...yeah..it's a boy..

The examples in Excerpt 7.15 illustrate how learners have a clear intuition about the importance of setting up location and character boundaries at the very beginning of the story. These narrators are basically searching for a combination of expressions which could precisely knit the state of affairs.

Similar lexical and syntactic resources to those referred in Narration One are used for integrating the elements of the skeletal structure of the story. There seems to be a common pattern chosen to maintain characters and events clearly referred by means of short concatenated clauses. Clarity is achieved in these reports by keeping a virtual stage by stage account of the story development. Narrators provide morphosyntactical resources for keeping characters apart, Adjectives define traits of age (*young*), nouns denote roles (mother) and relative

clauses delimit characters (a daughter who is five years old). Key aspects for location, such the place where both women are chatting, are clearly distinguished and intuitively marked in the plot structure. All this strategic marking generally occurs via repetition.

Extract 7.17 Strategic markers for characters and location

Mujgan:>> a...young..lady..eeh..(**1.0**)comes eh.comes..eh supermarket..
Rosario: a young lady..?
M: yeah..shee's..has(e) got..a handbag..big..big..handbag..no..
small..and..eeh..she bought something..eeh..off..off the..shelf..
eeh..she saw..(h)er frenz(**1.5**)..an(d)...eeh..her frenz..has(e) got..little..gerl..
and.. R:..her friend has a little girl...? M:.and she put(e) ..geerl..eeh inz her..kera..kerry ..car.

J: it seems ze housewife does the supermarket by car like she used to do it .. a long time..I think - in the supermarket to go through she carry a trolley /D:uhumm/ in the supermarket sh she she meets..she met another housewife- this is a friend.. the second housewife she met has a small child about one.. one and a half years..

The narrator reverses the sentence structure "*she met a housewife*" for "*the second housewife she met*" providing in this way, not only a stylistic variation of the repetition but also marking the reference of the second character to introduce the third character, which is the child.

Keeping that necessary balance between character identification and event sequencing under control operates together with the principle of economy, as illustrated in Excerpt 7.18.

Excerpt 7.18: Clarity and economy

I **:** this (i)story is about a young uman a young woman who needs some shopping (1.0)..uh she went to the supermarket.. I think and met a friend.. of her..uh who has uh.. a little a chill..a child..little child /O: yes/uuh..when they were..**(2.0)** *speaking* /O:talking/ talking with each other.. uh..the little girl uh uh took a bottle of.. a bottle of whiskey and put inside.. uh. the bag.. of the the first lady.. /O:yeah/ ..and.. but nobody uh..saw /O:noboby saw/ nobody saw it.. /O:yeah/and when..uh..**(2.0)**

Good narrators use tense-switching. Present tense forms are used for character description via relative clauses, while past tense forms accompany narrative development to refer events in succession, repetititons are used to establish cohesion and mark important areas of the narrative.

Even narrators with more limited resources manage to succeed in providing a comprehensible narrative account. Lexical problems are at times dealt with the interlocutor's contributions to do some scaffolding in the first case and replacement in the second.

Exerpt 7.19: Limited coding resources with reasonable strategies

a) D:well ***this children*** do uh **(1.0)**..(laughs)funny things..**is a naughty boy** (ha ha ha)..uuuh **the boy take uuuh a bottle of whisky** from theee..**(2.0)**
/J: **sshelf..** shelf/ **shelf? ...yeah**/yeah..uuuh put in thee..wallet?/J:(in doubt) yeah it's OK / **wallet..**yeah.. in thee ***personal bag***!/J:yeah/of..of her..
but eeh she don't know this..and go to theee..**(4.0)** *count machine*?

The narrator cannot retrieve the word “handbag” so he produces "wallet". But he senses the problem and resorts to solve the lexical gap with “personal bag” . This is an important “coining” because he needs to specify that this is not a carry-bag where shopping items are generally placed after checking out. It is also important to communicate the idea that the mother-shopper is not aware of what has happened, and when she is on her way out to the ‘*count machine*’ , (a good approximation to cash machine or cashier) she will have to face an accusation.

Narrators with limited coding resources stretch their communicative means as illustrated in 7.19b.

b) *O:and* ***after..uh this young woman (2.0) uuh finished the shopping****.. and paid the-ee uh shopping materials* - with money.., ***when she left****.. and shopping still.. eeh behind.. another old woman saw her and uh asked her..uh what is that.. in- your-bag? ..what is the bottle?..*

In this case, the narrator marks the end of the shopping episode with the simple clause *“after this young woman finished the shopping”* and adds *“paid the shopping materials –with money”.* This simple connection is necessary to prepare the outcome in the interlocutor’s mind: the woman has completed the shopping cycle. In the following sequence, “*when she left ..and shopping still”* although “shopping still” is inappropriate, it is used to refer that the woman was “*still”* inside *“the supermarket“.* The rest of the narrative flows nicely to prepare the climax of the story in which the mother

is accused of 'shoplifting'. The expression " *behind.. another old woman saw her and asked her 'what is that in your bag'*?" conveys the required narrative mood and reveals that with very basic syntax and speech-switching the tone required at this stage of narrative is accomplished.

A brief summary analysis of learners' performance at the second stage of narrative tasks shows that narrators gain control over the information structure by performing several strategic decisions. Controlled story-telling is at work when the reference of events is made at a proper pace and encompasing an interpretation of characters' inner thoughts shared in the same communication unit. Control over the elements which help the interlocutor to focus attention on character activity, clear location and event sequencing is essential for transmitting plot development. Most narrators select the here-and-now narrative to lead the addressee to perceive these details which develop gradually into the "emotive" or surprising moments.

Providing a label for episodes is strategically important to serve as a macroschema for the interlocutor. Clarity is provided along the narrative by means of keeping a virtual stage by stage account of episodic development. This is also achieved with a steady use of past tense forms interspersed with comments using present simple forms. Repetititons continue to be used to mark important areas of the narrative framework such as character identification and circumstances that lead to event changes and outcomes.

Other key strategic functions such as the narrators' perspective form part of the following section.

(b) The narrator's perspective:emotional involvement

Although In the presence of more limited interlanguage, narrators seem to resort to basic sentences as an effective resource for allowing more processing space, there also co-exists the need to reflect about their

"emotional" involvement" in story-telling. Various samples of performance at this second stage may well illustrate this strategic choice made by learners to enter in the 'dramatized' dynamics of narratives.

One important dimension related to the narrator's perspective during story telling is tense-shifting. Robinson (1995) analysed this factor from a cognitive perspective in terms of task complexity but in this section of the study, the problem is examined as a strategic move to activate a more 'involved' narrative version.

Tense-shifting may be motivated by different circumstances which could be imposed by communicative problems or specific objectives in the narrator's mind. In the first case it appears as rhetorically necessary for clarification checks, but at other times it is a strategic device to provide a different narrative pace to the story.

Several subjects in this second narrative task resort to reporting simple events which provide certain details about the arrival of the main character to the shopping center. Actions at this stage are characterized by a delayed pace which emphasises the shopping stage.

Excerpt 7.20 : Strategies for delaying the narrative pace

a) -*"first she parked the car in the parking..and went to a shop"*.
-*"she take a bag and came with a car "*, or
-*"she's going by car to the supermarket"*

Some reports refer movement during 'the shopping' as a stage by stage process ". Such Here-and-Now version (Robinson,1995) reproduces a frame-by-frame account of the picture story .

b) -*"she's in the supermarket now..and she's going to take the things..*
-*"she's in thee **(1.0)**...to take eeh.. butter and ..all the things".*

c) *C: a lady <u>was going to-oo.. do her shopping..</u>*
aaand she take a bag..and she came with the car..

M: sorry. ? .shee..
*C: she **came** in..eh with the car..and ..she's going in the supermarket to..to.do the shopping*
M: *..she's going by car to the supermarket?*
C: *yeah.. to do her shopping..hmmmm she buy many thing.. butter..aannd..*quietly she she go*..and.. make up the shopping..but **during.. that time .. she met another friend** of her who is doing also shopping..*

Tense-shifting helps to emphasise the tempo and mood of the on-going activity. In the specific case of this scene there appears to be the intention of providing that sensation of gradual movement of inspection through shelves while shopping. This is suggested by : "*quietly she go.. and make up the shopping*". The learner goes back to the past simple to stress the meeting point between the woman and her friend.

In Excerpt 7.21a, the narrating mode using past tense forms seems to predominate and it is only at the very end of the communication when there is a value judgement concerning the mother's honesty that there seems to be hesitation about using a present or past form

Excerpt 7.21: 'There-and Then' choice for narrating mode
a) *J: the kid..* **took** *a bottle of whiskey from the shelf of the supermarket..and pu.. and* **put** *it..on the-ee.. handbag.. of the another housewife.. so when the.. when this housewife..eeh* **were to left** *the the supermarket.. the supervise.. the supervisor of the supermarket..* **noticed** *that and* **stopped** *her.. outside..the.. the supermarket.. so she* **felt** *very embarrasing*.. because she don't know..she don't..she did..she didn't knew that

The use of past tense forms in Excerpt 7.21b is also consistently used for the pure narrative and the circumstance of the scene which provides grounds for evaluation appears strategically referred with alternative resources.

b) *C: ..and she **took** it.. duuring the time..of her mummy and her friend..speaking together..she took that bottle.. .a-annd* na-turally ***put*** *on the bag./M:yes./but put in the bag not in the bag.. mammy bag but the friend* ***bag..***

The mischievous character of the child's trick is prosodically marked by elongating the syllables in *'and'* followed by a stress in 'na-turally' to

emphasise that the final location of the bottle was not in mammy's but in her friend's bag.

Another strategic resource reflecting the narrator's involvement is provided through evaluative comments found at different points in the story development .

Excerpt 7.22: Interspersing narrative facts with evaluative meanings

a) *M:one day* a housewife.. **(1.0)** go to the supermarket shopping.. you know and she <u>*saw*</u> in this supermarket a very good friend- you know /J: uhmm/ with.. with with uh her children. *M:*in the shopping trolley.. they have some small seats.. *and uh.. she* ***took*** *a bottle.. a bottle of wine from the shelf.. yeah she took a bottle.. not of wine.. of whiskey.. a bottle of whiskey and* ***put*** *it..in the other trolley from the other girl.. from the other wife.. in the bag.. you know*

In Excerpt 7.22a we can see the narrator's involvement in the narrative, first by characterizing the mother as 'a very good friend'. This prepares the interlocutor to understand the total concentration of the women while chatting. The provision of a precise account of the sequencing of events and the places involved in the transference of the bottle from the shelf to the bag of the mother's friend marks the mischievous effect of the child's activity.

The narrators' involvement in Excerpts 7.22b through 7.22e is also evident by the provision of evaluative comments concerning the characters activity and the characters' reactions to the events.

b) S: these..two..is<u>.. *just talking*</u>..
the mind is.. away..**the boy take a wick..a whis..a bottle of whiskey.. and put..in a bag..of another woman..**because the trolley was near.. the other..

c) D:well ***this children*** (child) do uh **(1.0)**..(laughs)funny things..<u>**is a naughty boy**</u> (ha ha ha)..uuuh <u>**the boy take uuuh a bottle of whisky**</u> from theee…shelf

d) *and..she was surprised*..and the lady asked her to go with her to the office ..n' the manager take the phone.. I think is..to to ring to the police..yeah

e) I think..she's..<u>*she's really in trouble*</u>

'cause **(2.0)**..eeh.. *no one..saw the..just the supervisor..*

These comments, which are made about the possible mental states of the characters, as in "*the mind is away*", or interpreting feelings and behaviour (*"naughty boy"*) change the focus from ideational to evaluative meanings. These personal reactions seem necessary to draw attention and add significance to the outcome. The last statements judging the housewife´s confusion and state of mind contribute to the narrative tone.

The narrator's perspective is exteriorised in the more subjective and anecdotal character of communication and reveals the "impressionistic" nature of the narrator's feelings and reactions to what is going in the story. The rhetorical nature of narratives require this more subjective and intuitive involvement as a basic ingredient to provide "vividness" to the performance.

NARRATIVE THREE

(a) ***The coding resources of narrators and their perception of events .***

The third narrative task has a very clear story line beginning with a couple driving to the countryside, which stops by a pub to have a drink and takes a look at the ruins of a castle. The following samples of learners' performance in Excerpt 7.23 illustrate how the basic ingredients of narrative discourse are handled and organized with very simple resources.

Excerpt 7.23

a) D: well..hmm... is a pair.(*couple*).a car..imagine a car on a road yeah.. uuh..**(2.0)** arrive at a small village yeah..a small town yeah /C:uhmm/ and.. on the top..of the-e **(2.0)** ..of this-s town..it's uh ...ruins..of a castle /uhumm/ yeah..

b) *Mc: is.. is.. a couple* ***(2.0) hmm****.. and they drive off.. in a car....aaand.. they arrive at* ***(1.0)****.. very big house.. look like a hotel..or a pub.. you know / S: uhumm / ..aand behind this hotel..there.. uh.. like a castle..but..but.. very very old.. you..know..****(1.0)*** *like a destroyed castle..*

Lexical shortcomings are no impediment for putting the meaning across.

From evidence of the two previous narrative tasks we have seen that clear and economical characterization provides important processing space for plot development leading to an interesting denouement.

In many cases it is the interlocutor's intervention, with clarification check-ups, which marks the area of information which needs expansion.

Excerpt 7.25: Clarification

*R: uh there is a couple uh ..of..is eh..**(1.0)** he's a man of about eh..he's a young man..and she's a ..a girl..uh I think they are eh .. thee the relation.. is getting on ..good.. /*Æ: look like father and daughter.. or*../*
R: no no no a couple..

Reasonable narrative resources imply good clear episodic development and dynamic flow from the initial scene to the end. The virtue of the illustration in Excerpt 7.26a is that it immediately links character identification, scene setting and purpose of activity.

Excerpt 7.26: Use of narrative resources

a) *C: there's a couple..who's going..**(1.0)** uh to have..maybe a weekend. /u-humm/ and .. in the countryside?..*
and they drive until they find a little pub ..just nearby a ruined *castle.. /yes/*
they had a drink there */uhumm/..*
and there they met *an old man..*
and this (h)old man.. told– *to them about.. that castle.. /u-humm/*

The narrator provides a lot of information encapsulated within four subordinate clauses which effectively characterise the state of affairs: a couple going away for a weekend in the countryside stop by the road for a drink at a pub near an old castle. This initial narrative discourse is introduced in the present tense but immediately following, the narrator switches to the past tense to refer the activity at the pub with short propositions. which tells us that they have a drink, talk to an old man in the pub and learn about the castle.

Excerpt 7.26b provides another good illustration of a very consistent narrative along similar lines. The narrator has briefly identified the central

characters, and delineated the action that is taking place together with a reasonable justification for actions and tense-shifting.

b) well this is a young couple probably in honey moon..that travel..are travelling around england.. and.. in a sunny day.. they stop-ped in the country side at a pub.. to-o drink.. some fresh orange juice..

The story has been introduced by dynamically portraying key aspects related to the characters ('*young couple*'), scene-setting ('*probably in honey moon*') and development of events ('*traveling around england - stopped in the country at a pub*) This 'compressed' version of the main story line provides the necessary framework for interpreting the narrative.

The narrator appears to have a clear story plan because his mention of the couple having "*some fresh orange juice*" is not only related to conscientious drivers, but because it is a strong element to bear in mind for analyzing the story outcome.

Similarly, Excerpt 7.26c illustrates a narrative plan which combines clear character identification with scene-setting and appropriate event-sequencing.

c) *M:* **a couple**..*maybe* both..about twenty five.. */characterization/*
C:u-hmmm..
M: **they drive ..with the car..to to a romanti..to a place** .. *to a place*..to a pub
/ setting the scene/
C: ah!
M: it's maybe a weekend../*C:yeah/ then they drive..*
they drive a little bit around */C:u-humm/..like* maybe to visit an old castle and so.. they stop.. */action and locational shift/*
uh on front of this castle.. there's a big pub..
/expansion of action and locational shift/
and they go to.. to this pub *and they drink... they drink something (1.0).*

The fact that the narrator in this case does not identify the sort of drink which the main characters have, provides an element of ambiguity for the interpretation of the interlocutor at the moment of the resolution of the story.

The second most important part of the structure of the third narrative is built around the scene with the couple talking to the old man in the pub because it marks the changing point leading to the resolution of the story. The teller decides upon and creates 'intuitively' a way for establishing prominence and organizing the sequencing of events. Excerpt 7.27 illustrates how these effective narrative resources are strategically extended by good story-tellers with more limited language resources

Excerpt 7.27: Prominence of elements in transition to climax

a) D: well after that.. the more important thing perhaps in the..in the.. in the town..is the castle..the ruins of the castle

b) *Mc: they meet..with eh..a old man..annd they are drinking together you know.. the couple and the old man.. drinking.. an..orange juice annd they..are (e)speaking about something.. you know.. after that.. they decide to go the castle .. to see the the castle /S:uhuh/.. you know..*

c) *S: in this village.. they meet a friend.. or something.. a old man .. in a pub.. a hotel.. and* ***(2.0)*** *after drink.. orange juice.. theyy.. they went to..eh.. to see a castle behind thee the pub..* ***(1.0)*** *and they began.. to-o..to look around.. the castle.. they ran around..*

Excerpt 7.27a projects for his interlocutor the importance of focusing attention in the location in a very simple fashion. 7.27b and 727.c are slighlly more elaborate because it is the sequential arrangement of events with location markers and repetitions which enhances changes of rhythm and discoursive pace.

The scene of the apparition could have created referential problems for narrators with more limited resources because there are character distinctions to be made and reference to their positioning in location to understand the state of affairs. In general this was not the case, and even in the case of less proficient narrators, resources where effective.

Excerpt 7.28.: Coping with the story climax

a) *E:* and ..th-they took some ph-photographs.. s-suddenly.. when..the woman and man..eeh.. were speaking.. eeh . he saw..something eeh.. behind her..and eeh..(**1.0**) he said.'.look at that!..' but uh

hwen she t-turned h-her..head..th-the woman.. the woman who wore white..dress..eeh..she..disappeared..(**1.5**) so eh..she couldn't see her..and ..they looked for her.. they couldn't find.. and eeh.. the woman who's the girlfriend of him
he..shee..is suppose.. he has a high fever..*you know...he saw..* E: ..*something.*

G: uhmmm! **hallusination**..

Excerpt 7.28 shows that the narrator has coherently presented a series of actions that took place in a very short period of time and handles most of the event-sequencing by means of the 'there-and then' perspective combining past tense and progressive forms with single adverbial forms and clauses for changing pace. The use of direct speech clearly serves as a strategy to simplify the syntactic load . The use of adjective clauses around noun forms referring characters adds clarity to the narrative. The simplification of referring the bridal outfit with "wore a white dress" solves the lexical shortcoming. The reaction of the interlocutor culminates the narrative discourse with her interpretation of the "apparition" as "hallucination", which is evaluative in tone.

Excerpt 7.28b also illustrates a positive attempt to build-up the atmosphere of the narrative discourse towards the resolution.

b) D:yeah..hmm..this couple..climb..and..go to thee.**(2.0)**.. top of the ruins yeah.. to see that ..and take pictures..playing-
-well in the middle of that..yeah..these games. thinking..it's a surprise.. because is.. 'look..a-at a woman'..yeah.. behind his girlfriend yeah/uhuh/..'look at woman'.uuh wi-ith..the-e "engage-**(1.0)** suite"..

The narrative style is 'here-and now' and the progression of the event-sequencing is simplified by the use of only the present-participle and reinforced by the adverbial expression 'in the middle of that'. The use of direct speech is once more resourceful to syntactic simplification. The expression of 'engage-suite' is a good coining for bridal dress.

Excerpt 7.29 : Better processing resources
a) *M[a]:they were talking and.and the ghost appeared behind behind the girl..and the ghost was..a a woman..dressed and ..it was a bride..a woman dressed with a white dress..like in the ..in the..in a..(long pause) a... wedding..you know*

Better processing resources are reflected in the accuracy and approciacy of forms as in Excerpt 7.29a. In Excerpt 7.29b the learner appears to be less accurate but his use of adverbial forms and the use of more complex tense forms and modality reveals a more developed interlanguage.

b) *J:and they went **(1.0)**..together..to this place to **(1.0)**..to visit it..and zey took lots of pictures and seemed very yeah -lucky zat.. to see something..anyway..and aft..and after a while..he..**(1.0)** saw a ghost behind.. her..**(1.0)** which was wearing a bride.. dress **(2.0)** and..sh- he told her..**(2.0)** had seen a ghost and sh-she cou-..couldn't see anything..when she turned round ann...and ..thought..sh-' he's a liar' **(1.0)**..and told him off..probably..*

There is an important interplay of factors in the result of an effective and successful narrative effort. The communicative need drives learners to adopt more risk-taking attitudes which results in significant gains for fluency and complexity.

The selective analysis of the narrators' linguistic resources is crossed with the projection of the narrators' involvement. Both aspects are quite heavily intertwined and they constitute the essence of good and communicatively effective story-telling, as will be illustrated in the next section.

(b)The narrator's perspective:emotional involvement

The 'photo-by-photo-frame' fashion provides narrators with one channel to decelerate their narrative and embed the typical discourse of involvement. This procedure is counterposed to the more compressed style generated in the previous samples of good narrating pace to frame the basic story structure. Some narrative descriptions are engineered to build up atmospheres which mark characters. Such is the case of the characterization of the 'old townie' whom the couple meets at the inn.

Excerpt 7.30 : Framing the narrator's involvement

a) and they saw a ..man ***sitting in a bank.*** (bench) .in front of the house..a very old man..he seems very old

this kind of people used to have an..o- ***is used to having a lot of knowledge of the town..and a lot of things who*** (which ***) happen there.***

Participial phrases, together with prepositional phrases and clauses are used for discoursive expansion to provide information which is evaluative. The details about the *kind* of person the old man seems to be and the appraisal of his knowledge of what goes on in the town convey support to the credibility of this man's information.

b) then..there's there('s) an old man.. **really an old man.. a wise man**..and uh he explain a story about this this ruin..this castle..it may be something mysterious..something there...there..

A similar effect is obtained in Excerpt 7.30b with the provision of adjectives such as 'wise' and 'mysterious' and the use of modality which transmits value judgements established from contextual folk knowledge between age and wisdom and create expectation about location.

The Maxims of Clarity and Economy : 'Skeletonizers' vs 'Embroiderers'

Two contrastive modes of dealing with a story concerning language learners are referred by Yorio (1980). Some narrators simplify their reference to the basic structure of the story in a plain uninvolved manner. These are labelled "skeletonizers". Others provide details and exploit language features to convey a more dramatic and embellished account. These are called "embroiderers". Excerpt 7.31 is an illustration of skeletonizing.

Excerpt 7.31: Skeletonizing

a) E :and ..they . found a old man (2.0) eh and eh.. they have a chat (3.0)..eeh (1.5)..and they started...to visit.. the historical place..*which..I ..eeh t-tal-ked about it*(1.5).. and.they took..some photographs.. and they..

b) Mc: *they meet..with eh..a old man..annd they are drinking together you know.. the couple and the old man.. drinking.. an..orange juice annd they..are (e)speaking about something.. you know.. after that.. they decide to go the castle .. to see the the castle /S:uhuh/.. you know..*
the castle is.. behind the hotel.. but ..is ..on the mountain.. /S: yeah/

Involved narrators intervene in the narrative trajectory with the material they control about the story to shape the story in interesting ways. Narrators' comments about the couple's reaction to the conversation with the old man are ostensibly made to implicate the interlocutor in the climactic stage which is about to follow , as in Excerpt 7.32

Excerpt 7.32: Embroidering

a) M :they are really a bit surprised and interested about this..
they find this..very exciting..this couple..you know .. ..
*and so they say..ok..we're going to do a couple of pictures with this ruin..this castle..**(1.0)***

b) D: uuuhh this man..this townie uhh explained the history about the-e..the castle..yeah **(2.0)**..le-gend? /C: yeah..legend/ legend..well but the-ee..the couple won't believe all.. -do you understand?- perhaps...it's a ..it's a-aah stranger...man yeah..but.. look "bizarre" hmmm.. with this long long hair.. uuhh "estrambotic".

c) J: .. and as zey arrive... zey saw an old man sitting in front of a hotel or a..**(1.0)** motel and she starts talking to him..**(2.0)** and because he's very experienced..he told zem a lot of stories of the town..and uh also..he told zem that zere's an old building.. it was a castle or../M:yes like a castle..or something like that/..ah which which may be 'ev.. ghosts or uh **(1.0)**..some mysteries..are in it..or could happen there..

Embroidering is the strategy of involved narrators. Expressions like *'surprised', 'interested'* or *'they find this very exciting'* in Excerpt 7.32a are produced to portray the protagonists state of mind and convey their ulterior motivation and resolution to take photos from the castle. Excerpt 7.32b reveals a narrator with limited language resources but with excellent background knowledge to produce forms like *'legend', 'bizarre' or 'estrambotic'* . The expression *'but the couple won't believe all'* is a clear marker of narrator's involvement , which anticipates the next sequence of events in the story . Similarly , in Excerpt 7.32c, the use of expressions such as *'he's very experienced'* provides support to the old man's report on the castle , and *'which maybe 'ev ghosts.. or mysteries'* reveals the onset of the event sequence at the castle.

Illustrations of this type some positive planning of the narrative discourse because anticipated information is used as a lead-in to the denouement.

Excerpt 7.33: Anticipating information as marker of involvement

a) *J: yeah.. and they.. don't think .. and don't believe what the old man say.. so they decide to-oo.. go up to the castle..to-oo make..uh.. some pictures.. and to see how interesting.. she is .. it is..*

The narrator in Excerpt 733a gives value judgements concerning the couple's attitude about the ghost story. Consistent with this tone are previous references of narrators about the holiday spirit in the couple also present here in the idea of taking pictures.while visiting this old castle .

b) *E: and uh it happened that..they..**(1.0)** come come upwards to the... castle..which was..very very strange place.. so .. I think..it's uh it's a..**(1.0)** it's a haunt..you know what is a haunt?*
R: a haunt?
*E: in that castle..**(2.0)** it's something about..ghosts..*

In 7.33b the narrator's involvement is directly provided by the use of adjectives such as 'strange ' and is emphasized by the repetition of the adverbial intensifier 'very '. The more direct intervention of the narrator is with her personal appraisal of the situation through the form "I think".

We have seen in this analysis that the use of Direct speech by narrators is implemented as a means of simplifying the syntactic load of narrative discourse. In this section of the analysis there is a variation in use where it becomes the resource for strategically adding vividness to the narrative.

Excerpt 7.34 : Direct speech as a rhetorical device for vividness

*J: yeah an apparition behind his girlfriend.. a bride lady..a ma..a woman.. and he just tell her..***"oh. !.look behind you you there.. I saw a bride.".**
and this one.. *can't believe him and just uh she think he's just joking..or maybe sick.. uh /M:(he laughs)/*

The use of the past tense form *"I saw a bride.".* after *"oh. !.look behind you you there.."* marks the brief and evasive moment of the apparition. These rhetorical variations reveal undertones in the narrator.

Preferably, various strategic devices are instrumentalised to reflect an "emotional" involvement when telling the story, although in the presence of more limited interlanguage, pure narrative sentences are the strategic variety which allows more processing space. The use of various rhetorical devices during the narrative performance seem to be motivated by the variety of circumstances, such as clarification checks, improving the processing resources or changing of narrative pace to emphasise the tempo and mood of the story. . At times it simply reflects the need for making metalinguistic checks or concerning world-knowledge. When narrators "perform" a story, it is to furnish their story-line with a more vivid involving experience of that story, while exploiting special features as resources for highlighting the main point (Wolfson,1982). Some of those features which have been particularly singled out in this analysis are direct speech, asides, repetition, conversational historic present alternating with narrative past tense. Learners with better resources who are stylistically closer to a 'narrating' mode alternating tenses draw attention and add significance at crucial parts of the narrative. Learners with less resources but who are 'genuinely' good narrators, are still able to provide narrative involvement with strategic marks of emotive over ideational meanings contributing to render more refined story-telling.

THE USE OF STRATEGIES FOR PROCESSING NARRATIVES

Narrators guide their listeners through the establishment of an identifiable setting, character descriptions, spatiotemporal indications about events and their changes. In the previous sections we have analyzed some of the specific communicative strategies instrumentalized around the narrative framework for story-telling. One of the theoretical postulations of this research is that the processes and memory resources involved in

processing language for comprehension and production such as internalization of input, mapping meanings, analyzing and restructuring information have a general cognitive basis. The qualitative analysis of task performance during story-telling illustrates some of the learners' procedures to set up links between utterances to establish *semantic ties* at one point with other points in the narrative text.

A typical device discussed in the previous chapter to hold pieces of information together is repetition (Hoey 1991). Text information is connected by multiple repetitions which allow us to discover coherence. Narrative discourse is also connected by those repetitions which allow us to discover coherence through episodes. Those episodes which are particularly essential to the development of the story schema present various types of devices to structure the narrative text.

The previous analysis illustrated how specific cohesive markers are employed to trace character identification, location and time-shifts. This section of the analysis highlights the strategic resources at the macro-cognitive level which provide cohesion to narratives.

Repetition and the Problem-Solution framework

One of the most important strategic resources in narratives to establish cohesion is related to repetition. The repetition of forms provides cognitive support to story-listeners to reconstruct events in their minds. The narrative structure requires a plan which is organised around the use of these redundant terms and a schematic framework based on the problem-solution structure.

Many communication problems basically derive from limited resources in the use of cohesive devices. If available strategic skills are not adequately instrumentalised to help the interlocutor follow the story schema, a communication breakdown will most probably result. This section will also

illustrate throughout the three points in time how learners operate with these resources to establish cohesion in their discourse to cope with narratives.

Some learners are ready to recycle information when problems arise and replacements are strategically used to open new communication channels. In the example below, the narrator avoids using the term "brasserie" as a means of simplifying the lexical load and converging with his interlocutor to the concept of "one place". He is also interested in saving processing space to convey *the actual "state of affairs"*: the man came to "this shop" (the brasserie) and established some contact.

Excerpt 7.35: Recycling information

(a) J : at this shop.. zen he came..to a discuss..*discusition*..discuss..
conversation ..*they start a conversation*.
J: the man who *deceive* ..I *think is deceive(ing*)..and the man he think he lost his wallet../D:yeah/ he he gave him the wallet back and said."you've lost it".
D:uhmm
J: and zen.. *zen..start a conversation*

Immediately after this first setting up of the scene, the narrator recycles the same piece of information once more to link a new bit of information which is important to mark a future location shift.

(b) J: now..he's sitting in ze brasserie..on a table..
and start uh (1.0) this uh..(1.0) conversation..and we have
ze man and ze one who's got his wallet back.. and he ask him
where he go..and he says .I want to go to calais ..to france..

The introduction of the term "brasserie" for location establishes a semantic link with 'shop' , and 'table' in this text. The narrator repeats the reference to the two characters in the previous scene, "the man and *the one who got his wallet back*", but now marking only the second. At this point he introduces new information with the pronominalised forms "*he-him*". These forms have been strategically introduced as economical repetitions of the two characters which have been just mentioned, on the basis of parallel structure of occurrence. The new information contains two complex sentences "he ask him where he go" and "he says I want to go to calais.." Repetition of referents for characters here is pronominal and easily

retrievable on the basis of the conceptual values contained in the reporting verbs "ask" and "say". Calais is expanded onto France to provide another the semantic link for comprehension.

The provision of cohesion to narrative discourse has to do with a strategic attitude on the part of the narrator to convey some sort of a logical sequencing of ideas through creative cohesive means to supplement interlanguage shortcomings. The following discoursive structure serves to illustrate this point.

M: ..this...eeh..one man is ..is in ...eeh..in a pub...but..outside the pub...
and then..thee..(2.0) he..is..eeh waiting for someone...and..(2.0).. and then..thee..
suddenly one man comes...and ask..talk..him...is eeh ..'have have you lost..ssome wallet.. you..know..wallet?
S: ..wallet!
M: and..then...that.. iss ..eeh..(2.0)is like..eeh..like a club.. you know club../S:yeah/ because tha's a meeting..
S:..in the pub..?
M: yeah..in the pub..iss eeh (3.0).. is eeh..
S: *..is a close meeting..*
M. yes!.. thas ..thas meeting..is..to-to be happen..you know..

Fig. 7..2 : Mapping cohesive devices through repeated reference

The narrator has established several points of contact here through repeated reference. By connecting characters at a given location she conveys certain atmosphere for the story through lexical links such as *pub, club* and *meeting* which she uses to establish a semantic network providing an undertone of secrecy, which her interlocutor has perceived (S: *..is a close meeting..*). She obtains that succesful effect despite her limited resources ("that meeting ..is..to-to be happen")

Excerpt 7.36 Scaffolding

S: aaah!
M: aand..eeh.. **(1.0)** the.the wallet....to ask him ..if.. thas wallet ..is. theee ..**(2.0)**
S: aah..yeah!
M: ...eeeh.. **"*contraseña*"...** (transliteration, meaning "**password**")
S: ..the secret..**the secret**..
M: yeah..is **the secret**.. you understand

S: yeah yeah yeah.
Marcela:..aand..but...because..they..they didn't ..know before..you know../S:yeah/ and (**lexical expansion**) *that's (uh)..wallet is the secret..the secret..for to meet him there..and then..they sitting in the pub..*

Although the narrator's interlanguage is not very well developed, she overcomes her lexical shortcomings, by expanding her transliteration for "password" into "*that's (uh)..wallet is the secret..the secret..for to meet him there..and then..they sitting in the pub.*" Her partner is ideal for her because he provides remarks which are used for "scaffolding" and which motivates her to try more cutting edge interlanguage. This narrator's strategic resources provide the interlocutor with insightful perceptions about the state of affairs. This reveals a certain involvement of her own as a good narrator by providing sensations which are cogent with the story atmosphere.

The following example illustrates a narrative sequence with reiteration of structures with an outstanding amount of reformulations. This strategy is helpful for the narrator because she is expanding the references she makes (*marked below in bold type with underlining of expansion*) with the idea of providing a clearer and more accurate picture of her narrative to the interlocutor. These reformulations do the work of a camera zooming in to expand the picture that is being created by the story-teller.

Excerpt 7.37 : Strategic reformulations

a) *C: ...there's one young man.. **outside**..* sitting (h)outside of this ***pub***..or **bar**.. there's a small bar*...and eeh another man.. a little bit older than him..eeh*
*to-oo ..(h)**ask for to sit down**.. then he's invited to sit down.. **in the same.. place like him..(1.0)*** the same table..together.. *they sit there .. **and speak**..and have a drink..**(1.0)*** and they speak about..**a let-ter**..he's got **a big let-ter**.. a big en-velope..

The narrator uses the form "and then" to mark changes of events. This repetition is logistically made six times throughout the sequence and it is interspersed with reformulations to guarantee comprehension (marked in bold type). From this point on, the narrator takes the initiative to expand

and reformulate the sections which mark the change of events and contribute to logical sequencing.

Excerpt 7.38: Reformulations to mark event sequencing

C:: he take.. the packet..**the packet**.. and then.. uh later on..you know they left **..they passed**.. he go with his girlfriend and another friend of him..young.. all of this with the girl.. and then....you know..go for..london ..I think..because..you're in france.. **and you go in london**../M:yes/ and then he have to declare.. ...to say.. **"have you got something to declare"** . and then yes.. and through the luggage.. **through luggage** and then..he's looking there..and and *his package*.. **his french packet** *I think so..because the man.was. looked very impatient.. can I see this packet.. and among this packet..you can see something really..eeh eh a drug..*

Stories are often misinterpreted due to an information processing overload which could affect the narrator, the interlocutor, or both. Information concerning location and time shifts must be established through certain strategical interlanguage resources which are basic to establish sequencing of events from one scenario to another. This schema is essential for the establishment of cohesive markers and their role becomes a predominant one.

The narrator of the supermarket story marks event-sequencing by using the back-up of world knowledge she links "takes the car in the morning" with the motive "she´s going to buy something".

Excerpt 7.39: Background knowledge

R: a girl..who takes his car in the morning..uh I think uh she's going to buy something..she's going to the supermarket..
*shee..she's in the supermarket now..and she's going to take the things..she's in thee **(1.0)**...to take eeh.. butter and ..all the things..*

After using this cause-effect schema, there is a gradual sequence of repetitions such as "she's going to the supermarket" and then "she's in the supermarket" , "she´s going to take the things" which is a reflection of the a virtual photo-frame by photo-frame processing of the story.

The scene shift is marked by **'but'** and the introduction of the adverbial form 'while' . The next scene refers the two women talking which is

repeated twice. At this point the narrator provides the sentence **"she´s enjoying"** which, in conjunction with the repetition of ' **they're talking..talking"** reinforces the state of distraction of the two housewives while chatting.

> *R:**but uh** ..while she's in the supermarket ...she's talking with.. she met.. with a friend..she's talking with her..*she's enjoying*..I think and uh ..she's* with her little girl*..and with a little.. yeah..* the friend is with a little girl*..**they're talking..talking..**and.. they are in one corner..eeh.. the little girl..take uh.. a bottle of..I don't know what's that.. I think it's ..maybe sort..of wine..or something.. I think looks expensive..and uh the little girl..take one..and put in the ehmmm.. .. the little girl puts eeh the wine ..in the bag of from the other girl..you see..*

The set of repetitive forms has prepared the ground for problem development with the little girl putting the bottle in the mother's friend's bag.

The interaction of the clarity and economy principle

Narrators perceive the importance of clarity for the story-line and they concentrate on this cognitive aspect while processing language. They must direct their interlocutors' attention to the incidents which are central and lead to the climax of the story. They tailor their messages to accomodate to their interlocutor's perception. Clarifications, expansions and repetitions are all instrumentalised to accomplish the narrative task.

Excerpt 7.40 : Targetting clarity and economy

> *M:she **took a bottle..** a bottle of wine from the shelf.. yeah **she took a bottle.. not of wine.. of whiskey**.. a bottle of whiskey and put it..in the other trolley **from the other girl**.. from the other wife.. in the bag.. you know.. do you understand..if it's a little bit complicated I explain you again../*J: no-oo yeah I've got it ..and the the another housewife*?../*

The remaining version of this narration continues to repeat the circumstances of this mischievous act of the child with the corresponding climactic scene at the end.

> ***they didn't see**.. they didn't see that.. /J:* didn't notice that*/ they didn't notice that.. and .. after..she went.. to pay there.. you know..she went out with this bottle in the bag.. you know.. and **the supervisor**.. or a detective .. saw that..and this.uh …. because she was accused.. of robbery*

Learners with very limited interlanguage seem to implement alternative discoursive strategies along the lines of the problem solution structure. The use of this strategic procedure based on the principles of clarity and economy allows narrators to cope with their aim despite the limits imposed by the narrative structure.

one child..is..eh..**he's playing**..aah..while..eeh. ***her mother*** **is..tallking**..she.. **he *took a bottle of uh whiskey*..**
and **put ..in a..in a hanbag**..hanbag.***of*** .thee ***another woman***..
and eeh.. **the woman** eh..pass thee **(1.0)**..the counter..and she pay..and **she take..all her shopping**..eeh ..
one supervisor eeh..eeh.. take her and talk.... **"you have a.. bottle of whiskey in your hanbag"..**
and then..**she she look very surprised**..because..she .**she didn't know..nothing about..**and then ***the supervisor***..**eeh..call the policeman**.

Fig. 7.3 The problem-solution schema

From the analysis of this learners' version , we can see the use of the *problem-solution schema* to cope with this narrative. This discoursive strategy clarifies the essential points by first establishing a *situation* in which a mother is talking with a friend at the supermarket. While the women are talking, the child takes a bottle of whiskey and places it in the handbag of her mother's friend. This second stage articulates the problem. When the mother goes through the tills to pay one supervisor sees the bottle in the woman's handbag. This is the critical stage of the problem which develops into the last section, the *resolution*, which presents the woman in the predicament of having to face an accusation of shoplifting.

The problem-solution strategy uses information layers as signposts for the interlocutor to frame discourse. Both lexical and morphosyntactic devices are interspersed to establish certain markers which guide interlocutors in their interpretation. Since much of the information of a text is implicit for pragmatic reasons and requires support from the 'knowledge' and 'belief' sets of language users, in the context of narratives, those markers are basically the characters and the events

Narrators with particularly limited means to use cohesive devices need to make use of such devices to generate comprehensible sequencing.

Excerpt 7.41: Signalling narrative discourse

D:well the story is about uuh *a woman..who was..who got to the supermarket to do the*-eee **pró**bablity *quickily shopping*

aaand... *got by car..on theee.. on the supermarket*..
*she find eeh **pró**bablity -friend*..aah she spend uh a small time with her uuh*....this (1.0)uh woman have eh..*

*her friend have-children..*well *this children do uh .(laughs)funny things..is a naughty boy* (ha ha ha)..uuuh the boy take uuuh a bottle of whisky from theee.. /J: sshelf.. shelf/ shelf? ...yeah/yeah..uuuh *put in thee..wallet*?/J:(in doubt) yeah it's OK / wallet..yeah.. *in thee personal bag*!/J:yeah/of..of her..
but eeh she don't know this..and go to theee..count machine? .no.
re.. regíster ma-machine..I'm not sure..what..*the place where pay.. where to pay.*

These quite limited cohesive resources do their narrating job and are alternated with paraphrasing to cope with lexical problems.

It is only in the context of the simple but well-articulated information provided earlier that the resolution of the narrative may be understood.

Excerpt 7.42: Strategic devices for rounding-up

when finish *yeah..theee..* ***a security then arrive***

*and **ask she .if is.. all.. and she.. "yes is all"***
*aaah... well.."what happen with the bottle..do you have in thee..**(1.0)** the.personal..bag ?".*
- surprise - *"it's no my". ... "I can't do this."*

The use of time markers such as "*when finish*" followed by an event sequence "*a security then arrive*" , supplemented by indirect and direct quotes " *and ask she .if is.. all.. and she.. "yes is all"* constitute an extremely bold attempt to provide a cohesive version of the denouement. The narrator avoids long stretches of discourse and resorts to quick and brief referential information. He uses simple, parenthetical, short word forms, like "surprise" , to convey the state of mind and reaction of the housewife in the midst of her predicament. All these conjoined strategic efforts grant the learner extra processing time for rounding up the story.

We have seen in this research sample that information in story-telling is derived from locally, textually expressed propositions which delete, generalize or construct local information into more general meanings. These semantic mapping rules are recursive, so that one may have several layers of propositional sequences. The major problem when resources are scarce is to supplement cohesive markers with substitute forms that provide detectable links for tracing the story. Most narrators organise the cast and the events as markers which appear in the story in an order of climactic transition. In this case, the story is more clearly framed as a problem-solution structure by introducing the child, who is the instigator of the problem, and finishing with the police, as the hypothetical problem-solver. The strict order of events help narrators to maintain grammatical and semantic continuity within a single story unit when there is lack of resources for complexity and more specific time references.

The Crucial Role of Redundancy

At this stage of the analysis the aim has been to provide an account for aspects of cognitive processing related to the articulation of narrative discourse. The most typical strategy used by subjects during their narrative discourse is probably the use of redundant forms. We have seen several varieties of this strategy at previous points in Time One and Two. It may entail the substitution of a lexical item as in replacements, a paraphrase or a circumlocution of a problematic, judged to be important for the interpretation of the state of affairs. Redundancy has a crucial role in these strategic operations, since it is primarily used as a conceptual reinforcement but ultimately instrumentalised for the establishment of coherent narrative development.

It has been hypothesised earlier that logical story-sequencing is one of the basic criteria for coherent story-telling. In this sense then, learners' decisions to refer redundant information becomes crucial for the correct interpretation and subsequent analysis of the outcome of the story.

Excerpt 7.43: Fine-tuning for scene-setting

M: *they drive off.. in a car....aaand.. they arrive at . a very big house.. look like a hotel..*or a pub.. *you know / S: uhumm / ..aand* ***behind*** *this hotel.. there.'s. uh.. like a castle..but..but.. very very old.. you..know..(1.0) like a destroyed castle.. you know.. /S: uhumm / aand* ***(1.0)****..in this..in this pub...or hotel ..this house..very typical..*very typical of England..***(2.0)**

The narrator uses a series of replacements to refer the same place in terms of a *" very big house.. look like a hotel..*or *a pub."* The same type of repetition strategy used with the castle except for the variation which is via expansion of '*castle*' *..but very very old.. 'like a destroyed castle'* . The expansion strategy operates in this case as "fine tuning" to convey a more vivid almost visual impression.

Excerpt 7.44: Marking and anticipating story-development

a) *J: he told zem that zere's* ***an old building.. it was a castle*** *or.."*

"which which ***may be 'ev.(have). ghosts*** *or uh..****some mysteries..are in it..****or could happen there..*

If we try to interpret the role of these redundant forms in narrative speech we will see that these repetitions have specific functions within the narrative. Reformulations are sometimes used is to convey a more accurate identification of the character.

Excerpt 7.45 :Marking character expansion

M:and then..there's **there's an old man.. really an old man.. a wise man.**

The phrase "an old man " is somehow expanded into " really an old man" and then this becomes "a wise man". The narrator wants to communicate that this is a man who knows a lot about this place due to his age. The repetition in this case is aimed at a conceptual clarification. The use of the term "wise man" is really targetting the analogy between 'age and wisdom' as opposed to 'age and loss of mental abilities' for example. This idea is important in the context of the outcome of the story because the man is telling the couple what he knows about the place, and is expanding on stories about the castle.

When the narrator uses the expression *".it may be something mysterious..something there."*, he is preparing his interlocutor for an expansion of information which is extremely important.

Excerpt 7.46: Marking location shift

a) *and uh he explain* ***a story*** *about this* <u>this ruin</u>.. <u>this castle</u>..***it may be something mysterious***..*something there...there..*

they are really a bit surprised and interest about this..they find this..very exciting.. this couple..y' know .. and so they say..
ok..we're going to do a couple of pictures with ***<u>this ruin</u>***.. <u>this castle</u>..

The redundant marking of 'ruin' and 'castle' indicates a location shift which is chained to the next episode, briefly portrayed in Excerpt 7.48, with redundancy markers to characterize the climax.

Excerpt 7.47: Marking event-sequencing

b) *so both..**(1.0)** go there to this castle..<u>start to do some pictures</u>..*
<u>the boy friend..</u> <u>do some pictures</u> from <u>from his his court-girlfriend</u>.. *and.. suddenly…<u>he</u> saw behind <u>her</u>..**(1.0)**.. a bride..*

All these repetitions, replacements and reformulations activated by the narrator perform the role of taking the interlocutor from one scene to the other, from one episodic sequence to the next. These forms are not random-like because they function as cognitive strategic resources to provide cohesion to the text and coherence to the final communicative goal.

People can be better or worse when telling stories. Clarity in storytelling involves a process of ranking or ordering things that we do all the time in all sorts of activities, making rational decisions about what things need more attention, given the limited resources of time and language. Throughout the analysis it has been properly emphasised that characters in specific locations are instrumental in configurating episodic development together with event sequencing. Redundant information serves that specific role of signalling several images and relating concepts through successive impressions which provide cohesion and coherence in the interlocutor's mind.

SUMMARY ON THE NARRATIVE TASKS

The quantitative analysis to assess learners' performance when coping with narrative tasks presents a specific variability range along the three proposed measures of complexity, accuracy, and fluency together with clear indices for transactional language use.

Some interesting results have been obtained for complexity (52.69) as opposed to the total average for accuracy (12.27). These lower scores for accuracy implies a dimished focus on form in the narrative tasks, a factor which might be related to risk-taking attitudes on the part of some learners when dealing with event-sequencing and coping with processing load. The contrast between these results and those obtained for descriptive tasks (Cfr.Table 7.11) show a consistent move towards complexity in both task types with a stronger pace in narrative tasks and a tendency for accuracy ratios to increase in a constrained way but with better progression than in descriptive tasks.

The overall values for fluency are not significant to characterise specific trends although there are slight tendencies for reformulations and replacements to increase overtime. The modulated increase of these fluency factors could be the result of some processing load problems task-wise.

The statistics for transactional language use (Cfr. Table7.7) reveals a steady increase in the proportion of clauses from Time One (71.20%) to Time Two (79.28%) and a sustained slight variation for time Three (80.12%). The progression of improvement in transactional language use seems to be at a similar pace with descriptive tasks but perceptibly higher in values for narrative tasks.

The qualitative analysis has been instrumentalised to provide some support to previous research proposals as well as to discuss alternative

ideas for understanding the complex phenomenon of story-telling. The basic criteria to operationalise the analysis has been to decompose the narrators' versions which illustrate successes and failures at the specific levels considered to be indispensable for providing the story schema. Based on their communicative experience of prior events and their organisation of perception and reconstruction of the story, narrators have provided us with various typical procedures and strategies to cope with their tasks.

The basic elements which provide discoursive support to the narrative task are: (a) the coding resources of the narrator for perception and articulation of the narrative structure, and (b) the narrator's style . The narrator's mastery of the code is directly related to his perception of what should be the focus of events to develop his narrative plan, but the stylistic variations enhance stories in interesting ways.

The narrator's coding resources are responsible for the conversion of the narrative plan into a basic narrative discourse. The narrator's perceptive skills for characters and events improve communication and together with the reactions of the interlocutor play a significant role in shaping up the narrative. These basic factors modulate the narrative schema and influence the speaker's procedures to communicate the story in the best possible way.

One the potential problem areas for narratives is maintaining character reference under control. This is normally achieved with adequate noun phrases, appropriate modifiers and recognisable repetitions. Some problem areas provoke more communicative stress than others due to crossings from different information sources. Parallel actions implying character distinctions, at specific places, and at a given time require complex information-processing and multiple attention both from the productive and the receiving end. These potentially 'trouble-shooting areas' allow for opportunities to use 'cutting edge' interlanguage and motivate strategic behaviour in learner's performance.

It is also necessary to provide important details related to events so the situations which are central for understanding are adequately interpreted. In this respect, the narrative requires clarity at shift points. These shifts are connected with the dynamic relationship established between the characters' actions and goals in particular locations and at given moments.

Elementary syntactic resources in learners with more limited interlanguage are extremely important to provide conceptually-based information to convey a 'recognisable' state of affairs. Tense markers become a relatively important issue because in several cases strategic resources are activated to supplement shortcomings for referring action sequences. A number of prepositional phrases and adverbial forms are necessary for location and time shifts. The use of such linguistic resources is usually very unstable at lower competence level. Connecting words for discourse cohesion are randomly used , most probably due to a shortage of a minimum stock, but alternative strategic devices based on the problem solution-structure and repetition do their job.

The amount of detail provided in story-telling depends on the importance of the information which is being provided. This aspect is controlled by a question of relevance. The analysed samples provided along the chapter with regards to language use illustrate how narratives become more transparent either by trimming or by expanding forms. The information gaps created by either an unclear and limited production or a bad reception of the story-telling force the speakers to engage in a more precise style to reduce processing problems and clarify understanding. Many times this choice is necessary not only for correcting wrong perceptions but also for editing the narrative discourse in terms of accuracy..

Finally, learners seem to offer very specific stylistic variations interfaced with the cognitive factors which condition the quality of the narrative. Narrators not only tell us about what happened but also refer how they feel

about it. Typical narrators seem to get more emotionally involved with their stories. It is the atmosphere created with specific details related to the sequencing of events that provide the typical touch of their narrative style. The analysis of samples of learners' performance throughout the three tasks seems to suggest that although narrative involvement does not depend on more or less developed interlanguage, processing problems may make speakers decide to resort to a more direct and basic style. Although processing difficulty might encourage learners to opt for a more basic straightforward narrative version at certain points of a narrative, it is very hard to think in terms of "purely uninvolved narrators" .

Quantitatively speaking, the variable results in performance seem to suggest that some patterns of change are consistently moving in the same direction towards better language use. In a qualitative sense, narrative tasks continue to be an important source for generating a structured discourse mode to assess language production in L2 learners. These narrative tasks have not only allowed for opportunities in learners to engage in communicatively challenging goals but have also activated interesting interlanguage resources to cope with meaning which provide the researcher with better ideas about language development.

CHAPTER EIGHT

DATA ANALYSIS (3) : PROBLEM SOLVING TASKS

The previous two chapters have been focused on learners' performance in descriptive and narrative tasks with the intention of researching communicative resources to cope with these two rhetorical frameworks. On similar grounds, this chapter assesses learners' performance while coping with problem-solving tasks.

The first part of the chapter discusses the nature of the problem-solving tasks used in this part of the study and provides the basic framework involved in the information structure of problem solving. The quantitative analysis which follows characterises learners' progress in terms of fluency, accuracy and complexity with the intention of contrasting the subjects' performance when coping with problem-solving tasks over the three time periods and mapping these results in relation to developmental stages. The analysis of results should reflect sustained fluent performance in real-time, the amount of error-free language used, and the capacity to generate more complex language, time-wise and across tasks. Transactional and interactional language scores are also examined as a result of task conditions and as a reference for task achievement.

The second part of the chapter develops a qualitative analysis which, initially, looks into the ways learners organise transactional vs. interactional information to effectively cope with the tasks. At a second stage, the analysis is aimed at revealing how autonomous resources are organised by learners to solve the encoding and decoding demands of the communicative framework of problem solving. Finally, following the general structure of the research

study, an exploration of the learners' possible strategic pathways focuses on the cohesive resources which are used to organise discourse.

The nature of problem-solving tasks : a brief recapitulation

Problem-solving tasks are composed of a number of activities which need to be coordinated and executed. Efficient performance in tasks depends on *knowing what to do* at given points in time. When people learn to perform activities in general, they start out by developing *declarative knowledge*, which corresponds with the level of verbal knowledge, which is found in books, instructions, or spoken information (Anderson,1983). However, in order to achieve skilled performance you need to be able to translate *declarative knowledge* into action. This process is known as *proceduralization*.

It is important to explore this process in greater detail. Anderson (1983) claims that in the acquisition of cognitive skills for solving problems, people progress through three successive stages. The first stage involves the acquisition of domain relevant facts which are incorporated into the system's declarative network structure. Pre-existing knowledge about general problem-solving processes is instrumental in the establishment of a knowledge state for solving new problems. The slow pace and tentative nature of problem solving at this stage of learning are attributed to the need to activate and retrieve declarative knowledge from long-term memory.

The second transitional stage of learning consists of the creation of new productions from the declarative knowledge acquired during the first stage of learning. The mechanism underlying the transition between the first two stages, which is called *proceduralization*, transforms declarative information in long term memory into procedures for actions. The outcome of proceduralization is that declarative knowledge becomes embedded in procedures and the result of the process is that memory retrieval becomes unnecessary. Elimination of the retrieval of information not only has the effect of speeding up performance but also reduces the load on working memory.

In the third and final stage , the learner refines the productions which have been internalized and acquires considerable knowledge about the conditions in which a production should be carried out automatically (Kahney,1986). The learner also generalizes what has been learned, with the consequent speeding-up of the application of knowledge. The successful operation of this stage may lead to fluency in performance. Speeding-up is attributed to a mechanism called composition, an underlying process which allows for the integration of elements to render a more complex version of production. This more complex version of production is possibly associated with the reduction of operations of retrieval which allow more processing space. Anderson (1983) claims that there is a strengthening mechanism which operates on both declarative and production rules. Each time a production rule is used its strength becomes incremented; productions that are infrequently or never used after they have been created become weakened. The implication of this proposal is that repeated activities will have a positive result in learners' performance of tasks.

Strategical aspects of problem-solving

Three important strategical aspects of problem solving activity are generally referred in the cognitive problem-solving literature (Kahney,1986) : means ends analysis, the establishment of analogies and planning. *Means-ends analysis* is a very common strategy, useful in a large number of problem solving situations, including real-world situations. This sort of approach works through an analysis of the situation into goals and sub-goals by working out what moves (means) will allow the problem-solver attain the end goal. *The establishment of analogies* implies the active application of people's experience to interpret new problems in terms of what they already know. This strategic use of old knowledge in trying to understand new events for instrumentalising solutions is known as "analogical problem solving". *Planning* is related to the mental activity which subjects involve in while thinking to assess the state of affairs and the nature of the problem before deciding their moves to propose solutions (Thomas,1974). In this way

there is a typical planning-time involved before executing which will be more or less related to how complex the problem is.

According to Simon (1969) complexity may come more from the problem than from the system which learns to solve. In this sense, it is the complexity of the problem which will drive the problem-solver to produce complex behaviour, such as analysing the entities involved, organizing information and pathways to fill in the gaps that lead to solutions. Problem complexity derives, then, basically from the underlying structure of the problem which involves its cognitive contents, and the processing load imposed on the problem-solver's working memory.

The following discussion presents the characteristics of the problem-solving tasks implemented for this research.

The problem-solving tasks for this research

Two basic considerations have motivated the rationale for implementing problem solving tasks in this task-design. One is that the tasks should present a variety of rhetorical genres to target a range of discursive challenges and the other is that tasks are to provide increasing cognitive complexity to assess learners' performance across levels of difficulty within the same task.

Three problem solving tasks are used in this research: spotting oddities; spotting anachronisms; and spotting incongruities. The major source of information concerning each situation is provided by a picture containing "a state of affairs". This picture requires the assessment of the problem structure for the learner to devise a plan to cope with the different stages that lead to the solution. Each task is intended to be progressively more complex at each point in time. Some learners will be able to cope with a more reduced number of problems, but potentially could develop better linguistic resources overtime. The increase in complexity is progressive enough to allow for accommodation of learner abilities to the task demands but there will be

grounds to measure the quantitative as well as the qualitative use of language to solve the problems

Three basic aspects constitute the information structure of these problem-solving tasks:

(a) an identification of the entities involved in the state of affairs.
(b) the establishment of an analogical pattern which serves as the basis for detecting the 'odd' element and sorting out the solution.
(c) arguments supporting the line of reasoning.

The following is a graphical representation of the structure of the three tasks :

Problem-solving structure	Identifying Entities	Establishing analogies	Argumentation
Time1 : Spotting oddities			
Time2: Spotting anachronisms			
Time3: Spotting incongruities			

Table 8.1 : Aspects involved in the problem-solving tasks

Compared to the previous two tasks types, Description and Narration, in the problem-solving tasks, visual support is less extensive in number of images but more concentrated in focus. Each problem-solving task is presented in one picture which sets a problem which needs to be solved by scrutinizing, from the visual support, the possible clues to find the solution to the puzzle. (i.e spotting oddities, etc)

The major source of information in all these problem-solving situations is knowledge of the world and experiential knowledge. The subjects receive a picture which presents a problem-situation. Part of the task challenge consists in spotting the source of the problem.

In *Problem-solving Time One*, the task consists in explaining the source of ten errors implicit in one picture. The problem is presented as one photo of a group relaxing around a table in the back room of a house overlooking the garden (Cf. Appendix 3). The learner must establish an analogy to determine

the source of the mistake, on the basis of objects and personal items presented in wrong places.

The mistake-searching process requires concentration on the different situations that could be identified in the photo, such as somebody reading a magazine which is upside down, or a pair of non-matching shoes, probably the simplest error versions. The task increases in complexity when it forces an exclusive concentration on specific points and requires close attention to detect details such as a misplaced dumb-bell disguised in a fruit-bowl.

Problem-solving Time Two presents a picture containing a number of anachronisms. The source of the anachronisms is an historical mismatch between elements within the picture. As with Problem Solving One, there is a gradation of problematicity. There are a few more easily detectable anachronisms from the beginning such as people wearing nineteenth century clothes in the street scene, while other people are seen watching TV in their home. Other parts of the problem are not made transparent in order to avoid first-glance solutions , as in the case of men trying to light gas street lamp-posts while jet planes are in the sky overhead. The task reaches further levels of complexity, where the presence of a few disparities becomes less accessible at simple observation such as the handle-bars of a racing bike which a policeman is riding along the street.

Problem-solving Time Three contains two situations with contraventions of logic. One is a painting by Magritte and the other is a deceptive photo of a man who seems to be floating in the air. The painting suggests a landscape seen through a window overlooking several buildings of flats after a line of trees. The central part of the painting is the window frame which contains the exterior landscape. In the central part of the window , there is the painter's easel , which is disguised by a perfect match of the painting on the canvas held by the easel's frame with the view outside (Appendix 3 for Problem Solving). The deceptive photograph also presents a certain level of difficulty . The photo shows a human figure lying flat on an indefinite blue and white surface. At first glance the image appears to be one of a man floating in space in a stiff

position as he approached the sea. Once again there is a perceptual problem in this case , which induces to uncertainty about the state of affairs. The learners must unravel the perceptual illusions created both by the painter and the photographer and sort out what images are really present in the works.

Quantitative Data :The effects of time

This quantitative analysis provides a map of learners' performance in problem-solving in connection with fluency, complexity and accuracy, the same factors discussed earlier to assess performance with descriptive and narrative tasks. This time the analysis targets how learners deal with the cognitive issues involved in these tasks to establish possible significant changes in contrast with results from the previous task analyses. Following the same empirical line, additional values related to transactional language use are considered to obtain information related to learners' achievement. This part of the analysis is complemented with qualitative insights about the use of various resources such as, the principles of clarity and economy, the problem-solution structure, and other strategic devices instrumentalised to cope with cohesion and coherence in the task discourse structure.

Complexity

The basic quantitative results in Table 8.2. indicate that thirteen subjects show improvement overtime, with nine cases whose gain scores range between 43% and 189%, three cases between 20% and 36% and one case with 3.36% gain. Three of these subjects with positive gains present a decrease in complexity at Time Two but all of them peaked at Time Three with clear positive gain values. Only three subjects appear with negative gain scores: two under –13% and one close to -28 %.

The evolution of complexity with problem-solving tasks presents a significant trend which seems to have started at a lower level than in the other two previous tasks. But gradually the learners' performance evidenced a

relevant gain in discourse complexity over time. There was a mean score of 2,65 at Time One, which developed into 3.06 at Time Two to finish with 3.86 at Time Three. The average gain was equivalent to 45.66%, way above the gain of Description overtime, which was equivalent to 16.87%.

Complexity scores : Problem-solving 1, 2 , & 3

	Subject Id	C-Units			Nº Clauses			Complexity			Gain Scores
		T1	T2	T3	T1	T2	T3	T1	T2	T3	%
1	Giovanna	18	21	11	27	50	33	1,50	2,38	3,00	100
2	Elif	11	12	13	36	47	44	1,58	2,09	2,27	43.67
3	Charo	13	9	11	33	29	62	3,27	3,92	3,38	3.36
4	Mujgan	17	16	13	39	49	86	2,50	3,14	2,22	-11.2
5	Serico	8	5	8	19	20	34	3,07	2,33	3,71	20.84
6	Marcela	19	17	17	53	62	80	1,53	2,05	2,77	83.00
7	Johann	17	13	16	43	34	55	1,80	2,22	4,10	128
8	Daniel	14	18	14	43	42	52	3,15	1,88	4,25	34.92
9	Cecille	15	22	13	23	45	36	2,54	3,22	5,64	122
10	Maria	12	8	12	40	49	35	2,29	3,06	6,62	189
11	Mauro	9	9	12	33	26	63	2,38	4,00	4,25	78.57
12	José	12	11	11	19	23	25	3,33	6,13	2,92	-12.31
13	Inalda	8	7	9	20	22	20	3,67	2,89	5,25	43.05
14	Ozgul	10	9	10	18	19	41	4,40	3,33	3,20	-27.27
15	Rosa	13	17	12	41	32	51	2,53	2,62	3,44	35.96
16	Elana	10	9	10	44	30	32	2,79	3,65	4,71	68.81
Mean Scores		12.88	12.69	12.00	33.19	36.25	46.81	2.65	3.06	3.86	**45.66**

Table 8.2 : Complexity Scores for Problem-Solving Tasks over time

This gradual increase of complexity over time, with a more significant rising at the end could be associated to the fact that problem solving tasks require finer-grained judgements as they progress in complexity from T1 to T3 . The subjects must anticipate possible outcomes and the partner's contributions tend to produce more elaborate thinking processes as they develop conjoined develop discourse. The significance of this is that more dialogic tasks tend to be associated with greater complexity.

SLA research in the past has revealed that learners appear to restructure IL in line with developmental constraints, producing progressively more complex forms (Cazden, Cancino, Rosansky & Schumann,1975; Pienemann, 1989) but together with various non-target-like forms. Statistical data seem to confirm the hypothesis that learners not only differ

with respect to rate of development over time, but these differences also appear with differential task performance in terms of complexity and accuracy.

Accuracy

The comparable accuracy figures are shown in Table 8.3 below. From the thirteen subjects who have achieved more complexity overtime (Cf. Table 8.2), five have achieved an increase in accuracy as well. Two subjects with negative scores in complexity have reached positive values while nine have slightly decreased at between 3.24 and 12.98% .

Accuracy ratios have increased more or less significantly in 25% of the cases. Seven subjects have increased their accuracy scores, but gain scores seem to have reached relative significance in only three of those subjects, who have gone up between a range of 28% to 57%. Interestingly enough, these three learners belong to the lowest level group in performance at the initial stage of the study and reached raw scores of (75.0%) (84.3%) and (85.4).

Problem-solving		Complexity Scores			Gain	Accuracy Ratios			Gain
	Subjects	T1	T2	T3	%	T1	T2	T3	%
1	Giovanna	1,50	2,38	3,00	100	77,8	78,0	81,8	5.14
2	Elif	1,58	2,09	2,27	43.67	89,5	65,2	80,0	-10.61
3	Charo	3,27	3,92	3,38	3.36	86,1	72,3	77,3	-10.22
4	Mujgan	2,50	3,14	2,22	-11.2	75,0	54,5	80,0	6.66
5	Serico	3,07	2,33	3,71	20.84	81,4	85,7	80,8	- 0,73
6	Marcela	1,53	2,05	2,77	83.00	87,0	71,1	83,3	- 4.25
7	Johann	1,80	2,22	4,10	128	66,7	65,0	85,4	28.04
8	Daniel	3,15	1,88	4,25	34.92	53,7	68,8	84,3	56.99
9	Cecille	2,54	3,22	5,64	122	90,9	72,4	82,3	-9.46
10	Maria	2,29	3,06	6,62	189	87,2	83,7	88,4	1.60
11	Mauro	2,38	4,00	4,25	78.57	94,7	85,0	82,4	-12.98
12	José	3,33	6,13	2,92	-12.31	85,0	57,1	77,1	- 9.29
13	Inalda	3,67	2,89	5,25	43.05	81,8	69,2	90,5	10.63
14	Ozgul	4,40	3,33	3,20	-27.27	56,8	60,0	75,0	32.04
15	Rosa	2,53	2,62	3,44	35.96	100	94,1	90,9	- 9.1
16	Elana	2,79	3,65	4,71	68.81	96,2	91,9	92,5	- 3.84
Mean Scores		2.65	3.06	3.86	45.66	81.86	73.39	83.24	1.88

Table 8.3 Complexity and Accuracy Scores for Problem-Solving over time

Complexity-wise, it is worthwhile noticing that only three subjects had negative scores with a loss between -11.2% and -27.27%. Two of these subjects have contrastingly obtained positive levels between 6.6% and 32.0% in accuracy.

Accuracy-wise, it is worth pointing out that nine subjects started at a higher performance level of accuracy and experimented a decrease ranging between -0.73% and 12.98%. But the fact that all these subjects maintained accuracy raw scores between 77.1 % and 92.5% at Time 3 still shows an interestingly high level of error-free clauses. Another positive balance could be made around the circumstance that four learners who started with the lowest level ratio in Time 1 (ranging between 53.7% and 75%) showed gains between 6.6% and 56.9 % at Time 3. Such performance at the individual level could be considered as a plus towards learner development.

These statistical values also signal a very clear trend towards more complexity over time particularly considering that complexity scores started at the lowest end of the three tasks but finished very high. It could be generalised that this increase in complexity, which appears in counterbalance with accuracy, represents a very characteristic positive trend in all the three task types, and is most probably related to the increasingly conceptual demands of tasks. This circumstance is concomitant with the engagement of more cognitive resources which progressively leads to greater analysis, modification and restructuring of IL with better performance effects.

Issues of cognitive difficulty similar to the problem-solving tasks developed for this project have important implications for our understanding of how learners deploy attention during task completion. Givon (1985,1989) and also Robinson (2001) propose that structural complexity and functional complexity are directly associated. In this context, complex tasks would produce greater accuracy and greater complexity in learners' performance, conversely, simple tasks would promote lower complexity and accuracy.

The accuracy ratios for the problem solving tasks are the highest of the three samples, with 81.86% at Time One,73.39% at Time Two and 83.34% at Time Three. At time three, three of the subjects present accuracy scores between 75% and 77% , ten subjects present scores between 80% and 88.4%, and three subjects show scores over 90%. The mean scores of 81.86 % at time one and 83.24 at time three capture this positive trend.

These results may be supportive of the claim that increasing the cognitive and conceptual demands of the task, as is the case with these problem-solving tasks, may lead the learner to push output (Swain,1995). Learners try to meet those demands by means of reanalysis and restructuring of linguistic resources.

The modification of the learner's discourse is motivated either by the interlocutor's intervention by means of clarification checks or induced by the

learner's self monitoring or correction of the processing mode in the face of communicative difficulties.

Fluency

The data for fluency, with measures of pausing, silence, replacement, false starts and repetitions is shown in Table 8.4. When analysing tendencies for fluency expressed in the mean scores below , it is perceptible that the number of pauses increases over time from *5.94* at Time One to *6.56* at Time Two, to *8.19* at Time Three. This trend is consistent with the parallel situation created with pausing time. The first problem solving task generates less pausing (8.81) than the second (9.81) and third tasks (11.81), which reveal a clear increase over the first two. Together with the increase of pausing, there seems to be a consistent increase of false starts from T1 (0.31) to T2 (0.69) to T3 (0.81). Similarly, reformulations begin with a mean score of *9.50* at T1, with a slight increase to *9.69* at T2 and a very clear increase to *11.56* at T3. These facts might support the hypothesis discussed in the previous section in relation to the fact that as learners reformulate more there is a move towards accuracy,

In this sense, the differences in fluency attain a certain statistical significance with an emerging pattern of a clear decline in problem solving tasks over time. The level of significance (.08) generated for pauses is the only one worth mentioning. Nevertheless the analysis of the raw data tends to support the idea that on the basis of a larger population the statistical information would have rendered information closer to the pattern that more structured information in tasks would tend to generate more fluency.

From the perspective of individual performance, eight of the subjects who have attained higher gains in complexity have also become more dysfluent over time in terms of pauses and pause length. Reformulations appear to be on the increase in 50% of the subjects , a trend which probably favoured accuracy on the whole.

Solving	N°Pauses			Pausing ss			Replace			False Starts			Reforms			Repets		
Subject ID	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
Giovanna *	8	15	17	13	22	30	1	1	0	0	0	0	3	11	4	1	0	0
Elif *	5	10	10	9	13	13	0	0	0	0	0	0	8	5	4	3	1	2
Charo	8	15	11	9	20	18	0	1	0	0	0	2	9	7	3	1	0	3
Mujgan	10	8	9	14	11	12	0	0	0	0	1	1	9	7	6	3	2	4
Serico *	3	2	8	5	3	17	0	0	0	0	1	2	20	10	21	4	2	9
Marcela *	6	5	6	11	6	12	0	1	1	0	1	0	10	11	16	12	2	5
Johann *	3	2	4	6	2	4	1	0	3	0	2	0	3	0	11	1	4	6
Daniel	11	2	12	23	21	14	2	0	4	2	1	2	12	9	8	0	1	4
Cecille *	7	5	6	7	7	6	0	0	0	0	0	0	5	3	10	3	3	2
Maria *	4	5	8	4	7	10	0	1	1	0	1	2	13	19	19	1	2	2
Mauro *	3	0	7	3	0	12	2	0	0	0	0	1	3	12	13	2	2	1
José	9	5	9	10	5	10	1	1	1	0	3	0	12	27	14	1	4	1
Inalda *	7	9	11	11	12	15	1	1	3	0	0	1	13	9	15	3	2	1
Ozgul	4	9	4	8	10	5	3	1	0	0	0	0	9	4	5	2	2	2
Rosa *	1	5	6	1	6	8	1	2	1	1	1	0	13	12	13	4	2	9
Elana *	6	8	3	7	12	3	0	1	1	2	0	2	10	9	23	2	7	2
Mean Scores	5,94	6,56	8,19	8,81	9,81	11,81	0,75	0,63	0,94	0,31	0,69	0,81	9,50	9,69	11,56	2,69	2,25	3,31

Table 8.4: Individual Fluency Scores

Fluency, accuracy and complexity seemed to enter in competition with one another in descriptive and narrative tasks "with higher performance in one seeming to detract from performance in others" (Skehan & Foster,1999). Results here seem supportive of the hypothesis that there might be an associated effect for greater complexity and accuracy with the problem solving tasks but at the expense of dysfluency.

This increase of most of the elements which contribute to dysfluency on the whole is more or less consistent. The reduction of the fluency rate with problem solving tasks seems to be motivated by the learners' need to accommodate both to the task cognitive complexity and to their partners' contributions. The difference established among the three tasks demands might be explained by the processing requirements imposed by problem-solving for information retrieval, on the one hand, and by the more dialogic nature of exchanges between partners on the other.

Transactional and interactional indices

Transactional and interactional indices continue to be used here as measures to assess the level of completion which learners have achieved while working with tasks. They also serve as a fine-tuning device to assess learners' ratings of task difficulty across tasks.

If we contrast the results obtained by the group as a whole, shown in Table 8.5 below, we will see that the number of transactional clauses decreases over time. This progression affects eleven subjects with only five subjects maintaining an ascending range in the use of transactional language.

Problem Solving		NºCls/Tran Ratios			NºCls/Inter Ratios		
		T1	T2	T3	T1	T2	T3
1	Giovanna	59,3	40,0	51,5	40,7	60,0	48,5
2	Elif	78,9	26,1	52,0	21,1	73,9	48,0
3	Charo	63,9	51,1	61,4	36,1	48,9	38,6
4	Mujgan	70,0	40,9	25,0	30,0	59,1	75,0
5	Serico	79,1	61,9	63,5	20,9	38,1	36,5
6	Marcela	82,6	57,8	50,0	17,4	42,2	50,0
7	Johann	83,3	40,0	92,7	16,7	55,0	7,3
8	Daniel	78,0	50,0	62,7	22,0	50,0	37,3
9	Cecille	84,8	79,3	79,0	15,2	20,7	21,0
10	Maria	84,6	85,7	69,8	15,4	14,3	30,2
11	Mauro	47,4	80,0	58,8	52,6	20,0	41,2
12	José	80,0	77,6	88,6	20,0	22,4	11,4
13	Inalda	90,9	80,8	82,5	9,1	19,2	17,5
14	Ozgul	72,7	83,3	68,8	27,3	16,7	31,3
15	Rosa	69,8	73,5	74,5	30,2	26,5	25,5
16	Elana	52,8	64,5	73,8	47,2	35,5	26,3
MEANS		73.64	62.03	65.91	26.36	37.66	34.09

Table 8..5: Transactional and Interactional Scores for Problem-Solving

According to statistical figures, there is a sharp drop in the use of transactional language from Time One to Time Three in three cases, Elif , from 78.9% to 52% ; Mujgan, from 70% to 25% and Marcela 82.6% to 50%. In the remaining eight subjects the loss of transactional language use ranges between 2.5% and 15.6 %. These results could be interpreted in the context of two very important interrelated variables present in the problem-solving tasks : the more abstract nature of the tasks, and the converging character of their discourse framework. The first of these variables relates to the speculative

character of thinking processes required to cope with the task; the second involves gathering information in a joint fashion with some verbal output addressed to the partner to reach a negotiated solution. The nature of the performance imposed by these task conditions might explain the tendency to use more interactional language as a whole. The statistics, which show an increase from 26.33% of interactional language use at Time One to 34.09% at Time Three would lend support to this interpretation.

Generally speaking , the task achievement was quite successful within the group, with specifically graded performance revealed by the score range. While transactional language, with problem-solving tasks, continues to signal the amount of cognitively-oriented clauses typical of ideational meanings, interactional language forms present a new dimension with problem-solving. In contrast to their more socially-predominating role found in description tasks , in which they were used either as avoidance or achievement strategies, interactional forms, here , share a similar trend of use with narrative tasks. They may function either as comprehension checks or as expressions of difficulty through the negotiation. The interactive character of the problem-solving tasks, brings in a more natural turn-taking structure motivated by error-searching. This functions as a provider of cues for the interlocutor to follow a trend or change to alternative paths leading to the solution. A similar problem-solving-task framework is also found in decision-making tasks in which learners are given information about a given scenario and a problem to be solved. The presence of these new functional values are illustrated extensively in the qualitative section.

A QUALITATIVE PERSPECTIVE OF LEARNERS' PERFORMANCE

Language Use for Handling Problem-Solving Tasks

This section will include a qualitative assessment of the learners' performance on problem-solving tasks. As in the previous two sections of the

analysis which dealt with description and narrative tasks, this analysis targets the use of transactional vs.interactional language, the cognitive demands of the tasks, the learners' differing focus on form vs. meaning during performance, and their strategic resources to deal with discursive problems in the context of cohesion and coherence. The generalizations that will emerge here concerning the learners' paths while coping with problem-solving will complete the three-task analysis in this study.

A. Transactional vs Interactional Language

When learners performed descriptive and narrative tasks as already discussed in Chapters Six and Seven, the core information to be communicated was heavily *transactional.* This information served as a reference to evaluate the subjects' skills to cope with the basic communication structure. Interactional language was a very resourceful additional strategy used, either by learners with communicative problems for reducing goals due to inability to cope with task demands or, by "chatterers" willing to expand on an already fulfilled communicative plan.

The problem-solving tasks present an important variation in learners' interaction in relation to the more monologic activity involved in the descriptive and the narrative tasks. In both of these tasks, the framework of the discourse was basically generated by the individual in a one-way fashion, while the language generated by the problem solving task involves a major number of exchanges to reach a solution by agreement, typical of collaborative discourse. In this context the major production focus is triggered by an activity towards a common goal where both speakers construct discourse together. We will see how the learners achieved this in the following sections.

The language for spotting oddities

Problem-Solving Time One

The basic transactional framework for Problem -Solving One is centred on spotting oddities. The first stage of the task demands organising the

information structure provided by a picture associated with a social scene. There is a group of two young couples relaxing around a table in a backyard room overlooking the garden (Cf. Appendix for Problem Solving One) . The learner must establish a frame of reference to determine the source of the ten mistakes presented in the photo. These are related to the people, their personal items or some objects in the room which are presented in odd locations. The learners must move along from one knowledge state about the source of the error into another. In the following section we will illustrate how these moves help the interactants reach some sort of mental representation to access more difficult error levels.

The cognitive dimension of complexity in the first task is related to mapping information associated with entities which entail oddity due to the misplaced contexts in which they are found. These entities must be identified by the interactants. As shown in Excerpt 8.1, when a speaker has cognitively identified a problem area he must verbally guide the interlocutor by providing some sort of a window of attention towards the problem. This procedure of pinning down the oddity is the first stage of the mistake searching process. The second stage follows into encoding the information about the relevant properties of the discovered entity and the environment in which it is located to direct the interlocutor's attention towards the odd element .

Excerpt 8.1: Guidance and Focus on Properties

I: *aauuh.. because.. it's not difficult.. it's easy.. like uuh..uh..**(1.0)*** a man..uh..with..uh one shoe..uh red.. and other shoe.. brown..

Ch:>> *..eeh.. I mean.. if you have eh a glance to thee to the picture you can see* one of the girls is wearing.. one..in one leg..in I mean..in..on foot..a sportshoe.. but in ..to the.. in the other... is wearing.. boots ..

the other girl for instance..is..as well wearing one sportshoe .. but the other..I think..is to.. to do aerobics....more than for tennis.

The information selection in this problem-solving situation is determined by a *here-and-now* state of affairs. In Excerpt 8.2, both speakers have decided to introduce their turns by using interactional comments. In the first sample, there is a comment concerning task difficulty (*it's not difficult.. it's easy)*, while in

the other sample the problem solver is directing the interlocutor's attention to the picture situation (.. *if you have eh a glance to thee to the picture you can see)*.

Excerpt 8.2: Interactional Comments

M: yeah..four persons?
S: four persons..down there...and **(1.0)**..and ..the people are..sit down two ..are ..standing..some drinking.. some reading ..and (laugh).. and have a lot of objects.. in the..in the front of table..and something else.

D: well uuh it is.. a group ..of four people yeah.. and.. we can see.. a tennis-girl.. - the tennis-girl yeah..have her..tennis bot..boots..uuh..uh **(2.0)** legs uh.. militar boots..no shoes ..all to play tennis..yeah..dress..racket

The perspective here for transactional information is centered in objects and their inherent or functional properties. The criterion is similar in the following example but transactional language is expanded strategically to come up with the contrast of shoe type.

this girl have a shoe yeah..**one shoe is a plain.. tennis shoe** yeah..one..and the other **is a normal..street shoe**.

The simpler mistakes to spot tend to be those that are pointed out right at the beginning of the encounter. These are also the ones which are more frequently discovered because they are more closely and clearly associated with particular people.

Excerpt 8.3 : Ease of Mismatch Identification

*yes..I find just two..already..yes..*I find ..one girl..have an apple in the tennis racket.. thee another girl..sheee's read ..the magazine.. from..other..side.
- uhmm !

In this sample we see that the same informative organizing principle which was working with the first two subjects is operating here as well. The people are identified first and then the oddity which is associated with them. The two oddities which are presented here, sequentially, are signalled by pointing out a wrong schematic match, "apples do not go with tennis rackets" in the first case, and the wrong way of doing things, in the second.

Another example of mismatch is referred here in relation to wearing football shoes and a tie with no shirt as shown in Excerpt 8.4

Excerpt 8.4 : Mismatch Identification and Recasting

the other..man..have the shoes.. eeh.. have football shoes *and have a tie.. without shirt..*

The speaker who has spotted a mistake usually repeats the error with a small expansion, which in this case refers to the type of shoes, and provides further information to guide the interlocutor in the error-searching process by narrowing down the reference.

The effects of task complexity

The effects that certain visual arrangements can have to influence the subject's attention on items to be spotted in the picture is relevant for reducing or increasing "cognitive load" in terms of task demands. Cognitive difficulty is a significant characteristic in the design of these three problem-solving tasks, in the sense that there are important implications for our understanding of how attention is deployed during task completion, This also applies to dual task demands requiring reading comprehension and or interpreting drawings or illustrations (Robinson,1995). This dimension of complexity falls within the area of the degree of structure (Skehan, 1998) that task materials impose on learner performance. In this view, coincident with Van Patten (1990), cognitively demanding tasks are likely to draw attentional resources away from language forms.

Due to the nature of these problem solving tasks, which are more visually challenging, there is a gradation of problems to be spotted. Errors have been manipulated to create more perceptual difficulty for the problem-solver and hence additional complexity to the task. The harder mistakes to spot are, in most cases, the last two or three to get mentioned towards the end of the dyad. The objects presenting more difficulty were virtually half-hidden or

disguised in the picture and required quicker negotiation turns, as in the following example shown as Excerpt 8.5

Excerpt 8.5: Handling greater cognitive difficulty

he's drinking ***(2.0)*** *..wine*
- ciii--der. aah..yah,yah,yah,yah..yes.. yes.
the the label..of the the bottle.. is..another way.. another..
other./M:the label on the bottle-yes..the top..... I don't know how to explain
the top was at the bottom.. the bottom was at the top…

One learner has noticed that the problem is related to sorting out the type of beverage which the people are drinking. The learner believes it is wine but once this has been pointed out, the other learner tries to look for a more reliable source of information, the bottle label. The problem is that the label, which is difficult to read, is also upside down, an added difficulty for the task.

The following sample (Excerpt 8.6) illustrates precisely the same circumstance for sorting out the type of drink involved. Both speakers work out their way towards a solution with short interventions and interruptions about the point being negotiated. The brief exchanges that take place show how one learner's statement serves to guide the other to alternative intuitive moves.

Excerpt 8.6: Greater cognitive difficulty and collaboration

G: I don't know*...but the glass..is(e).. filled..with..eeh)*
E:..no...nooo..no
G: peraps..is..is.the..
E: it's impossible ..to realise..this
I.. don't know.. *beer?.... we have to..taste..this..*
G: yes..eeh..what..about..eeh..
E: they were..drunk.. wine..?
G: I don't know..if it's that..
it's wine..eeh...white wine..yes
*E: or..apple juice../G:*no peraps/ ooh..I think*..eeh..(2.0) the eeh.bottle...*
G: (interrupting)..no..it's..the same..Crispen..
E: the bottle has had a paper..but..it is..eeh..eeh..that's.. the wrong side..it is....mixed.. like that..yes.
G: yes..the lah-bel ..you mean..
E: label..yes..

The negotiating character of the task leads speakers to use shorter interventions and the need for scrutinizing errors motivates quicker turns (Duff,1986). In some cases, the use of very quick exchanges with basically

transactional utterances appear together with interactional comments to provide an idea about the learners' anxiety to identify the targeted object. Statistically speaking, these exchanges counterbalance the amount of transactional language use and include more extended negotiations which bring in more interactional language forms as seen in the transcript below. (Excerpt,8,7)

Excerpt,8,7: Intended collaboration to resolve difficulty

E:what are they drinking?
R: yes.. it's apple juice..no?..+
E: no.. not exactly
R:it's not alcohol..they can´t drink it ++
E:but it looks alcohol to me.. because ..the bottle ***(1u/3cl) <3+>***
R: I think it's apple juice..+ ***(1u/4cl) <1*><3+>***
E:apple juice..
E: no it doesn't say..I mean.. it's very..it's very hard..to.. ***(1u/2cl)<1*> <1+>***

R:I think.. yeah.. it's difficult to read..
E:but..eeh..
R:I think it's something of fruit..or.. ***(1u/2cl)<1*> <1+>***
E:aah..!
R: Crispen! what's Crispen? do you know what's Crispen?
E: what is eeh Crispen? Crispen? ooh!
R: I never heard.. Crispen.. ***(1u/3cl)<2*> <1+>***
R:yeah..oh yes.. the the..the 'lebel is in the right..is in the wrong position..
(1u/1cl) <1+>
E: the label?
R: the label..
E: I don't know what the label is about.. ***(1u/2cl)<1*> <1+>***
R: yes..because you have to to change..the photograph..
(1u/1cl) <1*>
E:uhumm.. yes..that was a mistake.. I understand.. ***(1u/2cl) <2*>***

Both speakers have produced here a very balanced number of transactional and interactional clauses. Transactional language plays a pragmatic role in communication, while interactional language forms present a slight contrast in relation to their more socially-predominating role previously found in monologic-type tasks. As the task becomes more complex, negotiations develop in the problem solving tasks, and interactional language appears more frequently interspersed to serve, either as comprehension checks or as expressions of difficulty.

The language for spotting anachronisms

Problem Solving Two: Establishing initial hypotheses

The transactional framework for Problem-Solving Two is based on a violation of time congruence characterised by several 'anachronistic situations' which must be discovered. In the first stage of the task, one subject is given a picture of a typical English scene which at first glance seems to be placed at the turn of the century. One minute later, the second subject receives an identical copy of the task picture. His partner's first impressions serve him as a frame of reference to judge the state of affairs. A convergent discoursive situation has once more been established.

The effects of the picture for the second problem-solving task are also visually challenging. The task complexity has been increased by making the picture black and white to make the spotting of anachronisms harder at first sight. The first part of the problem-solving task is, then, to establish a time reference which will serve as a starting point to build hypotheses about potential anachronisms. The entities which must be spotted by the interactants are either people wearing clothes which are more modern in the midst of the predominant clothing styles, activities which do not belong with the times suggested by the picture or developments or devices which are anachronistic.

The first impressions of task initiators are used as a guiding principle for building up their *time-referenced initial hypothesis*. Their intuitive guesswork is supported by various sources in which *prior knowledge* has a strong hold.

One learner expressed the idea of a past time with reference to the circumstance that it is very dark. Other learners use a different reference such as the one provided by the clothes which people are wearing or the presence or absence of certain elements or devices in the street scene, or even the general atmosphere.

Excerpt 8.8 Initial Hypothesis

a) O: <u>this picture about last uh century.. maybe..</u>
I: yeah.. because the clothes.. people is wearing..**(1.0)**is similar this last century./O:yes.. yes/

b) *M : a picture of **(1.0)**..a long time ago..ehmmm...(laughs) well **(2.0)**....is a picture..yes.. a long time ago..when we didn't have cars..and.. we didn't have a lot of modern things like now..*

c) *Ch.* I think it's in the last century because of the carriage..you know..it's not a car. It's a carriage with horses

d) Mar : this picture is from.. long, long time ago..(long pause) this picture look like ...eeh...could be in London about**(1.0)**...in the beginning...eeh . this century **(3.0)**...hmm..there are many...children...playing... in the streets...and the woman...is shouting in the..the windows..

Some learners with better interlanguage resources, begin by emphasising the urban type of scenery, which in itself, on the basis of architectural characteristics, serves as a historical reference as in Excerpt 8.9

Excerpt 8.9: Hypothesis based on general scenery

Elana*: the houses..are different...very nice..very nice..but must be..long..long time ago.. **it's a long time ago**..and **you can see it's a city**....**(3.0)** I don't know.. **(1.0)** f a hundred years ago..or something like that..I'm not quite sure.. but it's not nowadays..I mean ..you can see that.. maybe you have seen maybe in disneyland..that sort of thing..*

This learner wants to be redundant about the fact that the scene must be from long time ago. She uses a very interesting image to establish an analogy between the picture and mental patterns which people have at the back of their minds such as a theme park. Analogizing is sometimes very effective and it may immediately evoke a state of affairs.

The effects of task complexity

One of the hard elements to spot in the anachronism problem is related to *activities performed by people*. These circumstances are *ethnologically marked* and serve to establish the time parameter as well. This is the case of some children playing games in the street and using specific toys. Two children are playing marbles while another one is playing with a wheel near a wooden horse with wheels in front of a house. Another particularly difficult situation to spot in the picture is related to an individual next to a lamp post trying to light it as if it

were a gas light. The following samples illustrate three subjects which were unable to ascertain what it was.

Excerpt 8.10: Focusing on incongruous activities

***a) J** :another one.. it's very strange.. because hi(s) hands .. he has some thing on his hand.. I don't know what is it.. that look like ..a stick and he's behind a .. a street light*

b) O : and then on other hand.. I can't uh see exactly.. in the middle of the picture.. uh some.. one man.. show some thing in the sky..**(1.0)** oh..inside..uh.. take.. some bottom..but I don't understand.. what's there.. do you see.. this one..

c) *I*: I don't know what's that.. (long pause).. I don't know..
I don't know– probably.. the thing.. where you put the flag.. flag..
O: flag.. flag.. what.. there's the flag../
I : no problem.. something more ..strange../O: yeah/I: what?(long pause)
O: I couldn't find anything..

d) J: but the strange is that the lamp in the street.it shouldn't be up there..in this time...and the..**(1.0)** and what's.. the coaches ..and.. and the lamp.. the electrician lamp.. the street lamp is not the same time..isn't it.. this lamp..electrician lamp..on the street../D:yes/I think.. is the way.. to close.. the system..
D: yeah! the normal of this time is the gas light.. I think so..

An outstanding characteristic at this stage of the research is the capacity of the learners to cope with the task demands and produce effective transactional output. The negotiating character, also present at Time One, lends itself for using quick, short interventions while the visual hunting of anachronisms takes place. Some perceptions are related to an airplane ,but attention is immediately directed to lights in the street . (Appendix for Problem Solving Two)

Excerpt 8.11: Transactional language developed through scaffolding

O:but something..it's.. funny..**(1.0)** because for example.. a plane.. flying?.. two plane.. I th..*/I: two planes in the air.. electric light../***O**:yes/ uh..
O: and electrik(i)..**(1.0)** I.. I'm sure .. electrik(i).. did you see?
***I**: light.. well ..bul.. bulb.. I don't know*
O: light bulb..yes.. in the street..light bulb../
***I**: yes.. can you see the television..?/* **O**: yes and television/ *on the right side..yes.. two plane and the newspaper..* /**O**: and uh..,
***I**: did you see../*O: yes/ nineteen.. eighty four/

The learner first opens a window for attention, "*something is funny*", but the central point is, "*because…a plane is flying*". The interpretation of this

very economical statement is contextualised in the situation of anachronism-hunting. The other speaker reacts to that by admitting that there are "*two planes in the air*", but immediately recognizes that there is *"electric light"* in the scene as well. Both learners are generating structures via 'scaffolding'. The impressive circumstance is that at this point of the exchanges, there is a rush to point out two other anachronisms, the television, to the right of the picture and the newspaper, which is dated as of nineteen-eighty four.

The strategies used by learners when coping with problem-solving are multifarious and they are deterrmined, in one respect, by the nature of elements which intervene in the situation. Spotting anachronisms triggers in the problem-solvers certain guiding principles for building up their hypotheses. Their 'guesswork', which is only partially intuitive, is supported by various sources in which *prior knowledge* has a strong hold. Their discourse is heavily time-referenced, the key elements being people's clothes, people's activities in the street, elements in the scenery, the architecture, all of which are time-markers of the situation. Images are used by the speakers to establish an analogy between the picture and mental patterns which people have at the back of their minds. Learners instrumentalize these images to create windows for attention to the central points. In this context, analogizing becomes very effective because they help to evoke a state of affairs. Learners also generate structures via 'scaffolding', which comes up as a positive outcome of the exchanges motivated by the collaborative nature of the task

The language for spotting incongruities.

Problem-Solving Three

Problem-solving Three is based on two different deceptive situations provided by a painting and a photograph. Both images are equally challenging and they present specific complexity effects which are disguised in a painting by Magritte and in a photo taken from above of a man stretched out flat in a prone position. The two problems must be solved in successive order. Firstly, only one of the subjects is presented with a copy of the Magritte painting (Cf.

Appendix 3 Problem-solving-three). At this point in the task the subject must gather information very quickly to try to provide a general idea of what he sees to the other subject. Following the same procedure as in the two previous problem-solving tasks, the other subject is provided, after one minute, with a copy of the same picture. Since people differ in observational skills to cope with visual input , some specific observation time is actually granted to the first speaker to give him a confident start in the first turn. From that moment on, both partners share the information and initiate the exchanges in collaboration.

Organizing visual- imaging information

The transactional language used in this type of problem solving task is instrumentalised by the speaker to force the partner's mind into visually delimited *here-and- now* areas. Due to the fact that both subjects are, at a given point in time, looking at the same picture, the learners are virtually engaged in a checking activity. What one learner says serves to lead the other participant down a path which might be hidden from his/her perception.. The transactional words which are produced in this task context are not mnemonic as when describing or narrating, but key words used to orient attention.

The major challenge presented by the painting is the contrast created by the artist between the reality portraying the outside world and the reality portrayed inside the room. The learner must discover that opposition which has been disguised in masterly fashion.

The learner projects the perception of an image from a closed space into an open space. Information is mapped in a spatial manner with the learner's speech structured around a central concept which soon divides into details

There is a some sort of a tour taken into the picture with the intention of guiding the interlocutor's eyes because there is a geometrical distribution of the component parts which the artist has used to locate the viewer from inside a room with a central window overlooking the more colourful exterior area. This description of the picture from the inner space to the outer space is very clear and effective.

Excerpt 8.12: Conveying spatial reference

a)*S: very nice picture..(meditation pause)*
there is eeh... (meditation pause)
it's a window.. you're looking from inside eeh.. a
house.. from this window... there's a brown.. courtain.

.. if..you .. just look at the.. at the middle .. there is a painting of the the middle..of the road.. the tower.. and a bit of the.. the building.. and the trees..some trees.. and the sky.. a piece of the sky.. he's painting.. he try to... copy.. the outside of his window / M: ah yeah / understand..?

The same perspective is found in versions with even simpler language forms.

b) *Ina: this picture describes the view .. from one room /O:uhmm/*
the landscape you can see from.. one room
you have a window in the room..in the room.. in front.. and from this window you can see uh.. one part upon castle

Other learners follow exactly the same *spatial perspective* but with an additional *time-reference* , probably to create an atmosphere around the space, as shown in Excerpt 8.12

Excerpt 8.13: Assistance from time-reference

Mau in this picture you look from inside to the outside and you see..
/Cecille: ok, it's over and out../
oh...god!.. and you see (1.0) you see a village or a city in a ..(1.0) in the ***eighteenth century****.. seventeenth century ..something like that..*

The reference to the geographical area in terms of *"village or a city"* shows the learner's attempt to provide the idea of a mixture of country and urban landscape. The more open-ended nature of this visual map will enable the interlocutor to establish further connections.

The effects of task complexity

Two major difficulties are involved for the observer of the painting. The first problem is detecting an easel in the room containing the painter's work. The complexity arises because this part of the painting is superimposed in the window frame which shows the rest of the outside landscape not contained in the easel. The second complex problem is created by two identical conical figures :one corresponding to the top of a tower, the other one corresponding

to the extension of a road which progresses into a conical shape between two rows of buildings, until it disappears in the distant country side.

Once the spatial strategy of the inside-out perspective has been established , there are quick references to sections of the painting moving from the higher window area to the lower areas which show the landscape.

Excerpt 8.14: Systematic coverage of the painting

> *I: one sharpest point upon castle.. a lot of.. buildings.. and one road one long road.. in this long.. this road is so long that .. you can compar .. compare with the castle..*
>
> *but this road.. from from this.. uh.. from this window you can see this this road.. very very long.. and this road..uh ends in a shar-ped point.. you know.. this is.. exactly.. exactly the same – of this part of the castle.. (long pause)*

The last comment made by the learner refers to the symmetrical parallel road which can be observed as a mirror-image of the top of the tower on the left of the picture (Cf. Appendix for Problem-Solving Three). The perception of this effect is one of the complex problems of the painting which was not easily perceived.

Learners take similar paths to organise the discourse presented to their interlocutors. The spatial reference provides the recurrent means to supplement verbal resources, which follows the path: from a room , through a window to the town outside. But in Excerpt 8.14, the use of the expression "*a big window overlooking a town* " and reinforced by *"the town seems to be beneath the outside*" , provides redundancy to the factor of distance and signals for the interlocutor the importance of the view from above in the creation of the mental representation.

Excerpt 8.15: Developing an appropriate spatial orientation

> *G:>>* well we a-re.. in a room-m..(1.5) */E:yes/* with a big window.. */E:yes/* overlooking eh (2.0) ..how d'you say..a town */E:yes/*. but the town seems to be.. beneath /E: ah yeah/ the outside ..(*from)* where we are staying/E: yes/..

Elements present in the landscape such as the road also become an important reference because it is one of those details in the painting which creates the sensation of two symmetrical figures. The observation of this parallelism of shapes established between the roof of the tower, which is conical in shape, and the road leading to the countryside entails a very abstract conceptual inference to be encoded by the speaker in Excerpt 8.16. The parallelism set up with the road adds density to the message. Her interlocutor has grasped the intended meaning, which is signalled by her short turn.." */M: oh I see..".*

Excerpt 8.16: Negotiating the spatial orientation

> *Charo* : and there's something you know*..what I don't know is the name in english.. in..(1.5) in a castle..you know..this..part..very very..like this..(mime) like a cone you know..*
>
> well the first sight....*there is this cone.. there is..is like two..but when..at the first sight it's like if you-u could see two cones.. but one is the cone.. from the castle..and the other is the road..* /M: oh I see../
>
> *it is an street who-oo..which lead you to the country side.. at the first si-sight I thought it was two cones...but it's just really one of them..and the other one.. is the-e the road..it's the effect.. you receive..*/M:uhumm/

Transactional language forms are used here to report the ideational meanings related to the castle , the road and the similar conical shapes. But interspersed with these, we find the more interactional language variety to refer expressions about the task difficulty, such as '*what I don't know is the name in English'* , or perceptual impressions about the task, as in, '*at the first sight it's like if you-u could see two cones,* or , *at the first sight I thought it was two cones* , and, '*..it's the effect.. you receive'.*

This combination of interactional comments with transactional language use reflect the learners' attempts to transmit what is virtually seen together with their difficulties in expressing that reality while trying to interpret it.

The similarity of shapes is just one of the painter's creative devices which adds up to the task complexity. Some learner's are not novice

observers, and comments about the contrasts between the top of the tower and the road, as evidenced in Excerpt 8.17, are quite insightful.

Excerpt 8.17: More sophisticated description

> **C** *: the roof of this tow-er with that similar road who's going in-clined /M: ah yes../ and when you put that one together.. you just see../M: ah yes..yes I see now/ and actually..* **/M :yeah I see it now../** *yeah you can see it's got exactly the sa-a me..uh shape of the .. you know it's just paint.. the front.. what happens in front of the window.. just took.the same things and he played with that tower..he just painted that tower and that road...so it looks like it was two roofs..it was two roofs of uh towers.. yeah isn't it interesting...?*

The learners' comments reflect that combination of two lines of communicative intentions present in most speakers, an ideational one and an interpersonal one. The kind of interactional language generated with this particular type of problem-solving task is built around personal images and feelings. Images and colours are especially important in decision making, because these visual elements help to capture a combination of concepts and emotions. Emotions are an integral part of decision-making and are therefore given appropriate importance in problem-solving activities.

The photograph

The task complexity in this case derives from the deliberately misleading character of the chosen photograph, which shows a human figure lying prone on an indefinite white and blue surface. The learners must proceed to highlight hypothetical information around this single central figure. The scene requires concentration on specific points and close attention to detect details which serve as the basis for constructing an explanation about this figure. In a first stage a situational framework is established to organise ideas for categorising choices. These choices are made on a contrastive basis, such as whether the character is suspended in space or lying flat on the ground ; is dead or alive; is drinking water or observing fish.

The subjects were instructed to describe what they saw right from the beginning without allowing them any planning time. This procedure was meant to create, initially, a stronger deceptive visual factor, proper of first

impressions, and a possible incorrect version of the state of affairs as a result. This circumstance would force learners to make adjustments on any hypothetically-incorrect initial version, and would trigger modifications after more careful subsequent observations.

The following are a successive set of examples of the first reactions experimented by some learners. Excerpt 8.18a shows two learners' initial attempt. These first impressions are promptly self-corrected (as in 8.18b). The initial attempts for sorting out some clues are based on discovering the surrounding material in the environment. There seems to be some consensus about the snow/ice-hypothesis. This hypothesis is conjoined with the stiff posture of the man and the assumption that he might be dead.

Excerpt 8.18 : Initial Hypothesis

a) **G:>>** *shocking..*
E: **he is flying<1>**... no..snow..snow..
and **(1.0)**.. *do you think*..**(1.0) is it snow..or the seaside <1>**or..
G: ..ice.. peraps.. ice..
E: ooh.. **he's drinking water..look<1>**
G: well but.. eh..
no.. because.. it can't stand.. lying.. in this way.. *you know what I mean*
E: yes..
G: **..it's all** gla.. **all ice.. I think..**

b) E:**eh there is a man**..who..who lie down**(2.0)**..**who is lying down**..
G: ...*peraps* it's just dead..
Elif.. aah.
G*: I think* is eh a dead man.. this one..

Others (8.18c) seem to follow suit with the idea of a dead man but the material suggested to be surrounding the man is water. Finally, it is interesting that some learners drop initially deceptive hypotheses after a quick exchange of impressions as in Excerpts 8.18d and 8.18e .

c) ***M***: *uh I think he* **is dead** (1.5).. he's dead.. eeh .. **in the sea**..
I> *what do you see* Charo?

M: (1.0).. in the sea... I think..
R: **yes,.. I mean.. it's a body.. right.(2.5).. in the sea..**
well .. in the snow..
M: or *maybe*..in the..(1.0) in the..

R:..**this is..i..in the snow** I think so..
M: .no..no.*no I think*.. eeh...he..he drinks ..
eh..water
/ R: uhumm./..**(1.0)** from the lake ..*maybe*..(2.0) *I don't know*..

d) R: he's in the 'polo'.. or something like this...
M: yes,yes,yes.. *I think so..*
R: but..because..
M: .. because.. he wears....eh..very very warm..clothes..(1.0) wears very warm clothes..(1.0)*but it's strange*.

The negotiating character of these problem-solving tasks leads speakers to make shorter interventions and the need for scrutinizing errors motivates quicker turns. This dynamic flow of ideas activates the processing of information and leads participants into a more expedient way towards the solution. An outstanding characteristic at this stage of the research is the capacity of the learners to cope with the task demands and produce effective transactional output. The conjoined character of the tasks, as happened at Time One, lends itself for using quick, short interventions typical negotiating. Something similar occurred when the subjects were exchanging information at Time Two while the visual hunting of anachronisms took place.

In some cases, the use of very quick exchanges with basically transactional utterances appears together with interactional comments to provide an idea about the learners' anxiety to identify the targeted object. Statistically speaking, these exchanges counterbalance the amount of transactional language use

Interactional language use is once more connected with the expression of emotions, mental states and comprehension check ups, rather than with language avoidance. Forms like "shocking", "do you know what I mean", "perhaps", "maybe", or "what do you think" are very frequently tallied in the dyads for this section of problem solving.

Statistically there is an important intertask variation in the use of interactional language and as has already been contrasted in the quantitative section of the three task analyses, it could be generalized that the group with less

developed interlanguage seems to present a consistent drop of transactional language use in favour of interactional language use but learners with high transactional ratios have also dropped consistently towards the last problem solving task. The reduction of transactional language use seems to correlate with task difficulty but in some specific cases it also seems to decrease over time as a sign of conversational easiness.

The next section of our discussion will analyse other strategic devices used by learners to specifically deal with the problem-solving tasks.

The Use of Communication Strategies for Problem-solving.

Strategic devices have played quite a significant role in sorting out learners' problems with descriptions as well as with narrations. With problem-solving tasks, the perspective is, once again, centred in both the conceptual and encoding resources which are activated by learners.

In Chapters Six and Seven, it was postulated that the most typical strategic resources to present information are based on '*world-knowledge*', which serves to bridge gaps at the underlying cognitive level (Kellerman et al,1987). It was also proposed that at the discourse level learners seem to activate certain information schemas similar to what Hoey (1982) labels as the "problem-solution structure". Learners provide a very basic discoursive framework which conveys a state of affairs about the situation which contains the problem. The analysis of transactional language use has depicted the conceptual problems derived from the task complexity. The following analysis integrates the use of knowledge sources to cope with the organisation of discourse and targets areas of strategic use related to the principle of clarity and economy, the problem-solution structure, and cohesive devices for organising discourse.

The maxim of clarity and economy

One specific claim made in Chapter Six was that learners' strategic efforts are directed towards striking a balance between the intelligibility of their messages and the processing demands imposed by task complexity and meaning negotiation. That claim, which is based on the principles of clarity and economy (Leech,1983) is related to the fact that speakers are very often trying to adhere to both of these principles via use of *compensatory strategies* (Poulisse,1997). Reference is generally established in the most economical way possible, and more information is added, in a gradual and continuous way, only if the communicative goal is not reached. These principles are also operative when learners cope with problem-solving tasks.

Reference, in Problem Solving One, involved identifying characters and objects in a state of affairs marked by oddities. The fact that there are two female and two male characters in the first picture directs the learner to a reference problem. So when one oddity must be referred to, it has to be connected to either one of the individuals, or one of the sections in the photo.

The references "*one girl* " and "*the other girl*" for the women characters are an economical device to concentrate on the description of the oddity.

Excerpt 8.18: Clarity, economy, and clear reference

a) C : if you have eh a glance to thee to the picture you can see **one of the girls** is wearing.. **one..in one leg**..in I mean..**in..on foot**..a sportshoe.. but in ..to the.. in the other... is wearing.. boots .
the other girl for instance..is..as well wearing one sportshoe .. but the other..I think..is to.. to do aerobics....more than for tennis.

b) J *: **the girl.. on the left**.. **(1.0)** eeh..with eeh.. tennis.. **(1.0)** with tennis clothes..uh can you see.. on the.. **on her e-eh left legs**.. she she-ee wear.. a boot for rider.. for horse rider....you see..*

*and it's funny as well..uh **the right l.. feet too.. of the other girl.. is red**.. and in the **in the left leg.. she she ..she's got a white tennis...***

c) E : .one..of them..wear ..to the right...

she has ..eh.. shoes..but ..two di-different shoes.

G: ***yes..two different colours***..
E: yes..three... the four..
the woman on eeh..the left..she has has.. a sport shoes..

G:..***and a boot***
E:..the other..eeh..yes..a boot.

Other learners use alternative devices, as will be seen in the following examples, in which they switch and combine strategies because various contrasts must be established simultaneously. The examples in Excerpt 8.18b and 8.18c present problems of reference in connection to whether people's footwear should be mentioned related to 'feet' or 'legs', But the type of footwear is referred with adequate labels. Both use the verb "wear" in connection with shoes and one also uses *"'s got"* for variability.

Some learners sort out reference problems in tandem, as illustrated in these samples. The learner establishes the contrast of characters, first, by referring one of them "to the right", and then to the other one "on the left". This reveals that the learner can handle noun phrase reductions which are strategic variations of the economy principle. The interlocutor, being aware of the speaker's processing difficulties, provides assistance via scaffolding.

Most subjects in the dyads, as in the following case, resort to compensatory strategies to gain processing space.

Excerpt 8.19: Compensatory strategies and clarity

a) S : *and the the tennis girl.. have*..
one..one bl-black boot..black
M: black boots
*S:.. black boots..and **only one**..one tennis shoe.*

b) *S :.I find ..one girl..have an apple in the tennis racket.. thee another girl..sheee's readin' ..the magazine.. from..other..side.*

M: ..wrong way..!
S: yeah..wrong way..

The learner has coined "*the tennis girl*" to refer to the girl in tennis clothes. His reference to the shoe problem is brief and clear "*the tennis girl have one black boot and only one..one tennis shoe*".

The mistakes related to 'shoes' were perhaps the most obvious ones, because most learners spotted this mistake almost immediately as the first one. The mistakes which followed in quick order of detection were: a girl in a tennis outfit with an apple instead of the tennis ball, and another girl holding an upside down magazine (Excerpt 8.19,b)

In the phrase "*..one girl..have an apple in the tennis racket..*" , the problem solver merely signals the fact that these two things do not go together. In the phrase *"the-e another girl..sheee's readin' .the magazine..from ..other.. side."* syllabic elongation is used to provide processing space. The learner initiates a lexical search for an equivalent expression conveying the idea of an 'upside down magazine'. One learner comes up with "from the other side", but the other, produces a better approximation with "wrong way", which is immediately adopted by the partner.

Together with the characteristic economical turns and the dynamic flow of the exchanges, other interesting strategic processes take place. A few processes are activated in order to produce *reduced* syntactic versions which are implemented to deliver a lot of information on line. The learner here presents a good illustration of this discoursive type.

Excerpt 8.20: Reduction Strategies

D: we can see.. a tennis-girl.. - the tennis-girl yeah..have her..tennis bot..boots..uuh..uh **(2.0)** legs uh.. **militar boots** ..no shoes ..all to play tennis ..yeah ..dress ..racket

In this text the learner has created lexical bonds through the coding of 'tennis-girl', which had also been used by other learners before. He creates a cohesive device through the enumeration of sorts of clothes and equipment which belong to the same set "*tennis boots - all to play tennis - (*tennis*)*

*dress- (*tennis*) racket* " to lead his interlocutor into the realisation that "militar boots" do not belong with the set and therefore, is the wrong thing in the sequence. This is what he reinforces in the repetition of the information. This sequence of elements of the same set followed by the odd element in the enumeration is an attention-catcher to signal the mistake.

Although, in general, there is not a full explanation from the subjects concerning what elements typify the mistakes, there is some practical and economical reference to them with contextual support. Once task procedures are sorted out, subjects' exchanges to communicate errors tend to be short. Expansions occur only when the need arises to identify one of the characters or when there is a communication breakdown.

After some time of problem-solving, the identification of mistakes becomes more restrictive and flaws are more economically referred. References become quite succinct and there is a tendency to have a quick flow of information with brief checks concerning the number of errors. The exchanges of learners in Excerpt 8.21 illustrate the point.

Excerpt 8.21:Economy

E: and..eeh..(2.0) the man..eeh.. he has got ..only one shoe..eeh.
G:..yes..(laughing)..*he lost the other one*..
E:.. what..eeh.. did you count?

G: ..no....one. .
E:.. six.....and
G:..*what about..eeh... thee (1.0) glasses.. eh. unusual glasses*..
E:..yes..he's..yes..eh..she's got..these swimming.. glasses

G:..(jokingly) ..yes not..tennis glasses
E:..not tennis glasses

G: *or ..sun glasses..just..swimming glasses..so is...another..mis take(*a)..and..
E: and ..he ..has..he ...hasn't.. eeh..eh I think..sh-shirt..skirt)..she.. eeh..
G: *you mean..he's naked..*
E:eeh..he hasn't /G: his shirt/ he hasn't ..his ..shirt ..but.. he.. has-s ..eeh a tie

G: ..just a tie..without eeh..(1.0)
E: shirt..

Problem-solving tasks take a little bit of extra time for the pair in the dyad to get started into the right tone of communicating relevant information. Once a common framework for references has been set up, turns are taken only to confirm the other speaker's version or to continue in the line of error-hunting by signalling a new mistake. This activity usually takes place in a "cascade-fashion" and even with a humorous touch. This situation reveals that the task has been performed in a good atmosphere , which in the end conditions a better attitude for language use. Another important comment on the language used by learners is that specific turns are used as thinking-aloud protocols. This strategy is instrumental to present the logics behind the argumentation used.

Cohesion and cohesiveness:

The role of repetition and the problem-solution strategy

In Chapter Six we discussed how texts, according to Halliday (1994), are informatively organised, and how repetition is the typical resource which helps to glue pieces of information in a text together (Hoey,1991). Most texts are connected by multiple repetitions which allow us to discover coherence. Together with these devices learners usually develop a specific mental schema to cope with the problem-solving information. Such schema corresponds in general lines with the cognitive construct known as the 'problem-solution structure'. Information-processing to cope with problem-solving requires a plan. This plan is organised in terms of repetitions and the problem-solution structure. This section will illustrate throughout the three points in time how learners proceed to operate with these resources to establish cohesion.

Repetitions are systematically used by learners' and they function as a very effective device to put discourse together. Most of the time a great deal is achieved with these strategic resources. The following example (Excerpt 8.22) provides more illustrations of such strategies.

Excerpt 8.22: Strategic use of repetition

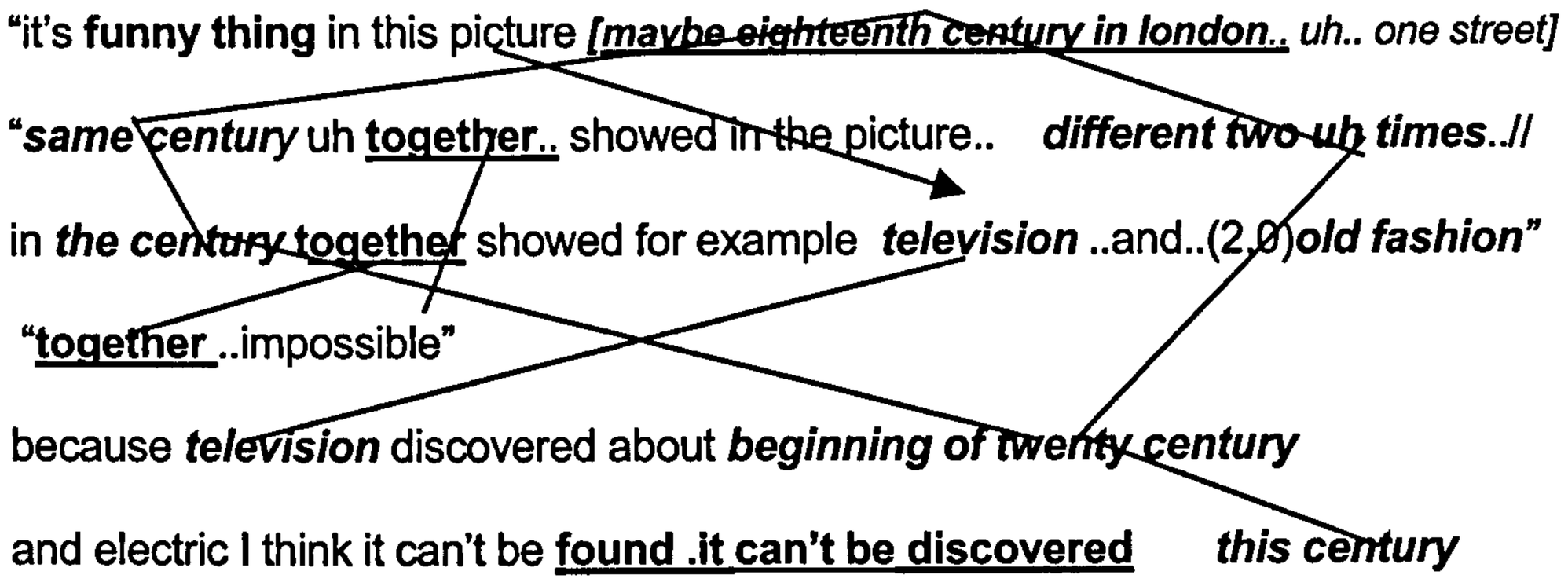


Fig. 8.5 : Information mapping about anachronisms

The learner needs to define the time of the picture first. Once this time has been defined she refers to it as "same century" which is equivalent to the eighteenth century in her mental representation. Now she develops the strategy of providing the conceptual image of "two different times which are co-existing at the same time in the picture". She provides two examples to illustrate her point : 'television' and 'people's clothes'. The first was discovered in the first half of the twentieth century, the second, implicit in the reference to "old fashion" corresponds to clothes which hypothetically belong to earlier times. The other element which violates time congruence is the presence of electricity ('*electric*') in the streets.

This discourse structure is organised via lexical repetitions and syntactic parallelism. Simple repetitions are present in the words 'together' and 'century' ; synonimity is present through 'century' and 'times', as well as in 'found' and 'discovered'. Syntactic parallelism is established in the simple structures below to state that 'two different times', which is an approximation to imply the anachronism involved , are shown together in the presence of clothes that belong to a different century coinciding with inventions that are later developments in time.

The following example (Excerpt 8.23) shows a variation of the role of repetition, which is used here for clarification purposes. Elif has difficulties in understanding the term "spot" and Giovanna provides at least four equivalent forms to explain the meaning.

Excerpt 8.23 : Repetition for Clarification

Elif:. *(reading)* sspot..ten.deli..berate.. mistakes.. what is deliberate*?*
Giova:aah.. you..'ave to *found* eeh(1.0)..ten mistakes..*I think.. recognise.. to spot.*
E: I see...something oh..yes,yes,yes.
*G:*you must check..carefully *and..(1.0) and eh find..out..eeh..ten mistake.*
E: ..yeah,yeah..I see..also ..one.. of..them
G: ..you you must study..this picture..a while*..annd..*

Repetition is also used as a wild card by certain learners to concentrate on discourse meaning as opposed to solving specific lexical problems. They prioritize the context and the message they want to convey over the lexical element that is lacking in their lexicon.

The following example (Excerpt 8.24) related to Problem-Solving Three, illustrates this situation very clearly. The learner is keen on expressing the idea that there is an easel with a canvas in the central part of the painting.

Excerpt 8.24: Repetition and Discourse Unity

S: if..if.. I'm.. if if I'm.. if you come.. to look at this
..this picture..this.. this picture.. is part of the-ee outside..
M: oh yeah.. I see.
S: you..see.. and there is nothing.. there's a window..
glass window... and then my picture..is..is..

In Excerpt 8.25 , below, the partner's intervention is the perfect foil for her understanding, and this serves as a guideline for Serico to plan the rest of his discourse.

Excerpt 8.25: Repetition and Discourse Structure

***S** :.. the picture is hanging in.. in.. a in..a.. I don't know the name of ..this.. there is hanging..and if you look to the.. this picture you saw.. the buildings.. the sky.. the trees.. the tower.. the road./**Marcela**: ah.. I. see.. yeah../*
Serico: .is is here.. you see.. all the outside of the..
*the streets /M: yeah.. yeah/ ok? /yeah yeah/ but.. eeh.. if you.. if..you .. just look at the.. at the middle .. **there is a painting of the** the middle..of the road.. the tower.. and a bit of the.. the building.. and the trees..some trees.. and the sky.. a piece of the sky.. he's painting..// he try to... copy.. the outside of his window / M: ah yeah / understand..?*

The learner, through the implementation of these strategic repetitions, has established a meaningful network which begins as an approximation

strategy and is expanded into "*a painting of the middle of the road..*" which refers to the painter's reproduction from "*the outside of his window*". Conveying this explanation is additionally complex due to the fact that the canvas is superimposed on the window frame which overlooks the landscape represented in the painting. (Cfr. Appendix for Problem Solving Three).

There is an incredible number of connections and associations which can be made in order to sort out a difficult situation. The range of associations vary depending on whether the difficulty is related to word retrieval (lexical) or to mental representation (conceptual framework).

Excerpt 8.26 Collaborative discourse structure

a) G: .where you put..eeh..**(2.0)** well.. I don't know how do you call in english..but..when you paint..
/E: the house/..you need.. . *no not the house*.. a picture..eeh
you need../E:when you're doing your art..when you are making a picture..I see/ you need a spot..or something..where to put../E: but where's thee..where's the frame of it../ yes… no it can't be..it can't be..

The first partner is trying to provide a logical sequence of ideas as they come to her mind, but this 'thinking-aloud' process requires a clear discourse structure to facilitate reasoning. This reasoning attempt is meant to be participative and the organization of the speech protocol targets a follow-up from the partner which is successful as a common processing effort.

A similar pattern of the same collaborative effort to reach a common framework for organizing observation and analysis is seen in Excerpt 8.26b with more evident success. The learner has succeeded in generating that complex cognitive representation via repetition and expansion of discourse with parallel images (this is real vs. this is not real) and spatial reference (on the right ;on the left; exactly in the same point).

b) *I: this is* ***the frame*****..** /O: this **is a picture** *!/ can you* ***see the frame..***
/O: yeahh../
the picture*..is posi-tioned..*
/O: yeah.. it's a picture.. it's not real/ ***this is not real but*** *../O: yes it's real/. this is*

exactly here on the left.. yeah ***and on the right, it's a real image..*** */O: oh my god../* ***a real thing and this is not real..*** *this is a picture.. exactly in the same point.*

Inalda*: I didn't know what's that..so all I have is guess..*
Ozgul*: this is a different point of view.. I: yeah.. right*
I thought that it was fi-xed on the glass /O:yes/
but it seems fi-xed on the glass..
*O: but I imagine this is a painting..material.. it's uh..****(1.0)*** *you understand what's that.. but when you're looking.. oh it's*
landscape ..you don't understand very well /I: oh yeah/
O: I think it's psychologic.. this material.

An important observation at this point concerns the fact that learner strategic use of repetitions aims at constructing coherence. Well-established parallelisms are interfaced with different forms of repetition which when adequately organised around the problem-solution structure render a more transparent discourse.

These utterances are a reflection of the kind of cognitive processing which goes on in the learners' minds to organise the discourse that leads to solutions. These cognitive operations are responsible for establishing coherence in the text and contribute to the creation of textual organization.

Problem-solving tasks involve a two-fold type of complexity: a cognitive problem related to the perception of the elements which constitute the state of affairs, and a language problem, present in the rhetorical efforts required for a coherent explanation of that state of affairs. Due to the collaborative nature of the task structure, participants need to develop a common plan to direct their attentional resources towards shared problem areas which are relevant for observation and important for a successful analysis.

One of the big advantages of this specific type of task is associated with the fact that language production must flow sequentially at any given point in time for a partner to share ideas. This situation generally triggers out loud comments (probably the result of concentrated thinking processes) which generate the expected sort of discourse found in negotiation. The resulting discourse operates range free and allows for an important web of associations for

weighing factors, all of which contributes to an enriched communicative performance.

SUMMARY OF THE PROBLEM SOLVING TASKS

The three problem-solving tasks have provided us with differential information concerning learners' performance at the end of this research. Two major aspects of the research design have made it possible to establish parameters for the detection and analysis of hypothetical changes in performance and potential patterns for interlanguage development: (1) the provision of a basic task-structure for all the tasks and (2) the implementation of reliable indices such as fluency, accuracy and complexity to assess learners' performance task-wise and time-wise. The first aspect is related to the provision of a basic task structure in each case, which serves as a template to judge performance on a qualitative basis. This approach provides better insights into perceptible changes at the interlanguage level in concrete areas such as lexis, syntax or discourse structure. The second parameter establishes the empirical basis to evaluate performance through a quantitative analysis operationalized in terms of fluency, accuracy and complexity as measurable factors of communicative attempts. This quantitative construct provides grounds to assess the presence of relevant changes concerning development in the learners' interlanguage system.

A qualitative evaluation concerning learners' task-based performance, analogical to the framework used in the two previous task analyses, has also been targetted here as an essential part of the research analysis. This approach includes an analysis of transactional and interactional language use, an evaluation of the use of communication stategies within the instantiation of a problem-solving context, together with an analysis of learners' resources to achieve discourse coherence and communicative success.

The use of transactional language continues to be, as in the two previous analyses, a parameter to appraise successful achievement in dealing with communication problems. Interactional language in descriptive as well as in

narrative tasks was used either as an avoidance or as an achievement strategy. The first case was typical during low-level performance in the presence of more demanding tasks ; the second case was a more typically-socializing strategy to keep conversation going when performance had been successful. In problem-solving tasks, interactional language use marks a switch from anecdotal references about the state of affairs to comments related to the learners' thinking processes. This added value of interactional language has been reassessed in the context of more negotiated performance required by problem-solving tasks

The use of strategic resources seems once again to be guided by the principles of clarity and economy which are effectively operating when learners cope with problem-solving tasks. Error-corrections or repairs are strongly taken into account depending on how disruptive the error is or how much more language processing is required for the clarity of communication. The additional efforts dedicated for repairing are many times also triggered by the learner's personal perception of cognitive difficulty in accessing adequate information-processing. The harder the problem, the more the effort. One efficient strategic use is 'discoursive expansion', which is triggered by the learners' awareness of task complexity and becomes instrumental in overcoming misunderstandings

Meanings continue to be mapped onto a problem-solution structure framework and coherent connections are established via repetitions, which provide important links to keep inferential reasoning and logical relations under control. All these devices provide the necessary cognitive support for adequate information processing for both speakers to reach a reasonably coherent solution to the problems.

The complexity of the reasoning demands required by this problem solving task has positively affected learners' performance, because they have produced more complex language, in spite of a reasonable decrease in transactional language use.

The most important aspect of the quantitative discussion is the evidence of an important intertask variation in the use of interactional language in contrast with the other two tasks. The group with less developed interlanguage presents a consistent drop of transactional language use in favour of interactional language use. This reduction correlates with task difficulty although it decreases significantly in Problem-solving three.

The most relevant qualitative aspect of problem-solving tasks done in a joint fashion with the idea of convergence in mind is that it forces the participants to coordinate beliefs about a common ground of shared knowledge. So although coherence is essentially built up from a cognitive process, the activity of working together leads to a conjoined process which implies convincing and demands more logical argumentation.

Learners' proposals of competing frameworks for interpretation may have cognitive consequences for modelling language use. Trying to come to a shared solution or adherence to the most coherent version might contribute to use language in a more intelligible way. This sort of strategic "grounding process" might explain the presence of more interactional language use with this collaborative task.

The general evaluation of this final part of the research provides interesting insights concerning the role of task variation from the pedagogical perspective. If we are concerned with instantiating effective and varied ways for achieving progress and development, the following analysis offers some consistent trends in performance which will be specifically highlighted in the final discussion of the main findings of this research.

CHAPTER NINE

MAIN FINDINGS IN THE CONTEXT OF SLA RESEARCH

An extremely important advance in SLA research has been a reassessment of learner performance within a redefined framework for the competence-performance relationship. The major point underlying this issue is the distinction between what the learner knows about the language system and what the learner does with that knowledge to put it into communicative use.

Learners need to develop an underlying language system as part of their interlanguage. A very important part of this development is achieved through "the learning by doing principle" (Ausubel, 1963), which implies that by means of actual language use, they must cope with ongoing and immediate communication. This creates a conflicting competition between a concern for system development and a concern for language use. The resolution of the conflict requires some clarification about how these two approaches interrelate.

If language production operates on the basis of the Gricean maxim of "economy " (Grice, 1975), which implies that what is said is normally said with the necessary elements to communicate, what basically matters to learners then, is "to be effective" more than being "grammatically correct". In the context of such a situation, Van Patten (1996) claims that learners would process input for meaning before they process it for form when language skills and conversational management are under pressure. This is precisely the point when communication strategies are activated.

It seems to be the case, then, that communicative effectiveness may be achieved at the expense of accuracy. When learners have accessed information which has helped them expand their knowledge into new words or structures, there is still some way left into the process of gaining full receptive control as well as full productive control of that knowledge. This alteration of the learner's system seems to mark the transition stages between his/her knowledge of the system and his/her ability to implement that use, although reality seems to be much more complex than what theoretical principles might suggest.

If second language learners develop a rule-governed system through conventional cognitive-learning processes, development in second language acquisition would be more likely to proceed via cognitive mechanisms (Skehan, 1998). Within this hypothetical framework, some very concrete resources are available for the learner to ease the burden of communication : a certain degree of underlying linguistic competence, a reasonable amount of world knowledge, and the ability to exploit a set of strategies. Strategic resources play in this respect a particularly important role, allowing learners with the prospect of reducing communicative pressure by manipulating the communicative demands and by creating devices to organize ongoing discourse with necessary adjustments for being effective.

Provided that learners would process input for meaning before they process it for form, some cognitive research has been oriented to explore what could be done to concentrate the learner's attention to form and make him/her notice it (VanPatten and Cadierno 1993 ; Doughty,1991 ; and Foto and Ellis,1991).

Results obtained from the implementation of the three task types in this research suggest possibilities for pedagogical interventions with the clear intention of motivating conscious awareness in the learner about the complex understanding of meaning-form relationships. The following section includes a brief cross-task overview together with the corresponding variations of cross-

task analysis over time accompanied by a general analysis of statistical results and their implications for this research.

Task-based approaches: the research background

From all the different types of learning activities which have been proposed in the last decade or so for a more active involvement of learners in the productive use of language, perhaps task-based pedagogy is the one which ranks higher for effectiveness. Tasks, according to SLA researchers (Long and Crookes,1991 ; Pica et al´s, 1993 ; Willis,1996 ; Skehan 1998) are meant to have pedagogical value, mainly because they are based on real-world communicative needs. But this communicative character of tasks does not guarantee a specific focus of the learner on the formal aspect of language production to achieve a proper balance between meaningful, fluent communication and accurate and complex language use.

Research into tasks is most certainly guided by the researcher's theoretical concern. The two specific lines of research which have characterized studies in the last decade or so are either *interactionally* or *cognitively* oriented. The first research-type has emphasized the importance of modified-interaction as a condition for learning and supports the importance of negotiation of meaning for successful language development to take place. The second research perspective emphasizes the importance of the learner's internal cognitive processing of information as the basic framework which operationalizes the route towards development. In the first line of research, data is coded and analyzed in terms of indices such as *clarification requests, confirmation checks and comprehension checks* generated during the negotiation process (Long,1989 ;Duff, 1986 ;Pica,*et al,* 1996). Since in this framework, the major research concern is the predominant role of the negotiation of meaning for learning, there is a specific emphasis on the exploration of the modifications in input resulting from such negotiation. Although exposure to meaningful language input is useful for language learning, this might not be sufficient to ensure successful performance and output practice becomes necessary to help the learner's progress in production. (Swain,1995).

In the second line of research, the focus is in the importance of learners' cognitive processing for comprehension and production. In this framework the emphasis is on the learner's personal involvement to establish form-meaning relations, and on the implementation of cognitive efforts to generate effective communicative resources. The most frequently used indices to assess learners' performance are *fluency, accuracy and complexity*. . Fluency has been operationalized in a number of ways. Pausing frequency and pausing time have been used together with measures such as repetitions, false starts, reformulations and replacements (Brock, 1986; Crookes,1989 ;Foster and Skehan,1996,97). Accuracy corresponds with the number of error-free clauses generated by the task and complexity is operationalized as a ratio of subordinate clauses per communication units.

Theoretically, the three types of measure relate to different aspects of performance and development. These measures derive, on the one hand, from the systematicity of interlanguage and the way in which it is organized by the learner, and on the other, on the strategic way the learner makes use of this knowledge to cope with on-line communication.

SLA research on tasks provides evidence that different types of tasks seem to elicit different types of language and pose different sorts of communicative problems (G. Brown et al.,1984). Prior knowledge of form or content related to the task may have differential effects in learner performance. Both Brown et al. and Prabhu claim that tasks requiring selective information transmission, together with reasoning to establish causality, are more complex than tasks without this kind of demands and tasks that require fewer different elements that need to be contrasted and described. The complexity elements involved in these tasks are likely to require a wider range of linguistic resources from learners such as more sentence connectors, subordinate clauses, and complex noun phrases .

The following section is an assessment of the tasks used for this research followed by an analysis of the statistical results of learners' performance.

ASSESSMENT OF LEARNER PERFORMANCE ON TASKS

Two basic factors are intertwined in the set of questions which have motivated this research: one is related to the accommodation of learner language use to *task features*, and the other to the accommodation of learner language use *over time* . The task factor implies the internalization of input, mapping the integration of form, meaning, and function, analysing and processing of information for output in terms of description, narration and problem-solving. The time factor is directly connected with potential progress and language development. Both factors are scrutinised in the context of the three important performance variables implemented for this study : fluency, accuracy and complexity.

The hypotheses which are put into test will be examined in the light of the statistical results of the learners´ performance while coping with the different tasks and highlighted according to the variable factors involved.

Hypothesis One : *There will be differential performance effects concerning the three tasks.* This will happen as the result of implementing different discourse modes (description, narration, problem-solving). The different discourse modes will place different demands upon the learner's language system. This will affect results in fluency, accuracy and complexity.

	Descriptions			***Narrations***			***Problem-solving***		
(No. Pauses per 5 mins)	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
Fluency (PausingTime)	8.38	8.19	7.81	9.56	9.13	9.84	5.94	6.56	8.19
Fluency	12.56	11.31	12.31	13.75	11.94	12.38	8.81	9.81	11.81

Table 9.1 : Fluency factors across tasks and overtime

At Time One, the least fluent performance is with narrative tasks, while problem-solving tasks generate the fewest pauses and description tasks run second. Nevertheless, as fluency tends to decrease overtime with description tasks, in narration it stays more or less at similar levels, but in problem-solving,

pausing, which causes dysfluency, presents a steady increase at T3. Pausing values may relate to a speaker's current processing capacity, but they may also vary according to task conditions and task demands which require formulation of concepts.

Hypothesis Two: ***Fluency is directly associated with the task type. Tasks which are lower in complexity structure will be associated with positive gains in fluency and vice versa.*** Fluency seems to reflect the learners' capacity to cope with communication in real time. In this sense, fluency measures, besides number of pauses and pausing time which are related to hesitation and thinking processes may point to communicative problems. In the context of fluency scores in Table 9.1, we will see that the number of pauses together with pausing time are the main variables taken for fluency. As a matter of fact these variables are the most important in the context of hesitation problems which interrupt speech. Other values involved here are related to false starts and repetitions, which also reflect hesitation phenomena. A third group of fluency variables are reformulations and replacements which are more clearly on the repair side of messages and therefore, positive action for overcoming problems.

	FLUENCY								
Variables	***Descriptions***			***Narrations***			***Problem-solving***		
	T1	***T2***	***T3***	***T1***	***T2***	***T3***	***T1***	***T2***	***T3***
Repetitions	3.69	2.56	2.63	3.88	2.50	3.75	2.69	2.25	3.31
False Starts	0.63	1.13	1.56	1.13	0.88	1.06	0.31	0.69	0.81
Reformulations	9.06	9.31	11.44	12.88	14.06	13.13	9.50	9.69	11.56
Replacements	1.25	1.63	1.44	1.69	1.25	2.06	0.75	0.63	0.94

Table 9.2 : Other fluency factors across tasks and overtime

This high number of reformulations, which is reflected as a characteristic of the group as a whole, lends support to the hypothesis that if learners appear to reformulate more with time there is a tendency to approximate to more accuracy. On the other hand, the fact that the numbers for false starts

in most subjects is significantly smaller in the sample and that the number of pauses together with pausing time seems to decrease reveal a positive trend towards a future improvement of fluency.

Hypothesis Three : ***Task complexity will increase the learners focus on form which is also reflected on accuracy.*** It seems to be the case that the difficulties centered on contextual factors push the learners to a higher number of reformulations and repairs as can be seen in Table 9.2. Such strategy makes it possible to overcome a wider range of difficulties such as referential problems, propositional structuring and discourse cohesiveness. The figures reflect the moments when learners exploit their resources upon perception of pressing communicative demands.

	Descriptions			***Narrations***			***Problem-solving***			Significance
	T1	**T2**	**T3**	**T1**	**T2**	**T3**	**T1**	**T2**	**T3**	
Accuracy (% error-free clauses	**76.64**	**75.42**	**79.50**	**69.07**	**68.87**	**77.55**	**81.86**	**73.39**	**83.24**	**.001**
Complexity (Clauses per c-unit)	**3.14**	**3.38**	**3.67**	**3.34**	**3.93**	**5.10**	**2.65**	**3.06**	**3.86**	**.001**
Fluency (No. pauses per 5 mins)	**8.38**	**8.19**	**7.81**	**9.56**	**9.13**	**9.54**	**5.94**	**6.56**	**8.19**	**.08**
Fluency (Pausing Time)	**12.56**	**11.31**	**12.31**	**13.75**	**11.94**	**12.38**	**8.81**	**9.81**	**11.81**	**.17**

Table 9.3 Accuracy, complexity, and fluency overtime

Accuracy increases consistently over time in the three task types with very specific drops at Time Two in all cases. The results shown in Table 9.3 indicate that the least accuracy is generated in narrative tasks, followed by descriptions and finally by problem-solving tasks. Nevertheless, the accuracy mean scores in narratives at Time One were under 70%, while accuracy scores at T3 came close to 77.55%, a higher score for accuracy levels than those reached with descriptions at T1 and T2. The presence of lower accuracy levels for narratives compared to descriptions might be related to the characteristic structure of narrative tasks which require a stronger focus on

specific rhetorical resources, for good character identification and clear episodic development from beginning to end. Narrators have an important perception of the importance of clarity for the story-line and they concentrate on this cognitive aspect while processing language. They must direct their interlocutors' attention to the incidents which are central and lead to the climax of the story. The progression of mean scores for accuracy in narratives over time reveal that despite the more demanding cognitive load implicit in the task structure, there has been perceptible improvement in learners' attention to language form, an indication of better prospects for language development to take place.

Hypothesis Four : ***The more interactive tasks will generate more accuracy and complexity of language use.***

(a) There will be a differentiated change in the accuracy levels used over time.

(b) Complexity levels of language use are also hypothesized to vary across types depending on whether the tasks require transformation of elements or more complex decision-making .

Interactive tasks are associated with greater accuracy and complexity, but lower fluency (Hypothesis Four). This proposal (Skehan and Foster,1999) is supported by the fact that accuracy is improved due to certain favourable conditions such as: a communication-driven push towards precision, the availability of more time to focus on form during partner's turn, and a recycling of partner's language for editing and re-using correct forms.

Nevertheless, the claims of Hypothesis Four do not seem to be supported by the findings of this particular research. From the collective interpretation of the task scores in Table 9.3, we can see that there is a gradual increase of complexity with the three tasks overtime but with a more significant increase in the narrative tasks, which are more monologic. It is interesting to point out that the complexity mean for every narrative is higher at every point in time even than the corresponding description task. These

values are probably related to the higher structural clarity of narrative tasks in this study (the learner had to retell a picture story) over descriptive and problem-solving tasks. The fact that *narratives* also involved more transformation in the informative structure than *descriptions* due to the element of surprise present in the outcome of stories may have pushed learners towards more complex language use.

The problem solving tasks generated the lowest index of complex language use at T1. This lower achievement in complexity could be explained by the simpler nature of the problem-solving structure at this stage. The oddities which learners had to spot were embedded in a more familiar state of affairs for the observers, since the elements to be identified were common and the circumstances involved in the mismatch were contextually easier to explain. This situation changed dramatically at the subsequent stages in which the state of affairs was related to spotting anachronisms at T2 and spotting incongruities at T3. The second problem-solving task at Time Two, which involved spotting anachronisms, presented more irregular scores, but this might be the effect of a wrong estimate in the task choice concerning the reliance on the learners' background knowledge for evaluating the source of the problem. The third task for spotting incongruities was probably equally difficult, but the problem-solving structure involved more observational skills for concentration on the picture itself to reach solutions.

The conditions for these problem-solving tasks to be performed in a two-way, convergent fashion, forced participants to coordinate strategic efforts on the basis of shared knowledge. And, although coherence is essentially built up from a cognitive process, the special character of the problem-solving activity in this case involved organising some common sense judgements. These judgements, which provide the framework for the logical argumentation, are put to test, accordingly, and help to tailor the line of reasoning implemented by partners in their turns. Probably the nature of the problem solving activities devised for T2 and T3 involved more inferential reasoning which made the

tasks particularly difficult to cope with. The processes involved for sorting out solutions drained the possibility of articulation of more complex language forms

Hypothesis Five : ***The growth of capacity in language production will be reflected in the potential increase of transactional use of language.***

The increase of transactional language use over interactional language use will reflect improvement in the learner's competence over time.

The incorporation of the two indices related to transactional and interactional language use was meant to serve as a fine-tuning device. This provides the opportunity of substantiating information concerning the amount of cognitively-oriented clauses used in the tasks as opposed to the more socially-oriented language type.

Transactional and interactional language use provide an interesting pattern which emerges by examining the values in Table 9.5 below. There is a consistent move towards complexity in both narration and description tasks with a stronger pace in the former. These results provide some support to Hypothesis Five which claims that transactional language use is related to more appropriate language use. Transactional scores are steadier in narration tasks, while they decrease significantly in problem-solving tasks.

	Complexity Scores			Accuracy Ratios			Transactional Ratios			Interactional Ratios		
Task	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
Description	*3,14*	*3,38*	*3,67*	*76,64*	*75,42*	*79,50*	*57,21*	*59,45*	*65,85*	*42,79*	*40,55*	*34,15*
Narration	3,34	3.93	5.10	69.07	68.77	77.55	71.20	79,28	80,17	28.80	20,72	20,58
Problem-Solving	2.65	3.06	3.86	81.86	73.39	83.24	73,64	62.03	65.91	26.36	37.66	34.09

Table 9.5 : Mean Scores for Complexity, Accuracy and Transactional Values Overtime

There seems to be, though, some parallel progression between transactional use and conditions for more complex communication. Interestingly enough, this increasing gradation is parallel in descriptions as well as in narratives, but decreasing in problem-solving tasks, in spite of the

clear push towards more complexity of language use in problem solving Time Three. The overall picture points to some trends in the description and narration values and in the last stage of problem solving which lead to believe that learners seem to move towards transactional speech over time.

Hypothesis Six : ***The increase of task complexity will force learners to produce better language resources for the sake of communicative quality, reflected in better fluency, complexity and accuracy.*** Task complexity allows to trace differential language use from a qualitative as well as from a quantitative perspective.

A framework by Robinson (2001) proposes the following effects of task complexity on accuracy, fluency and complexity along resource-directing dimensions.

monologic tasks

simple	**complex**
+ fluency , - complexity, - accuracy	- fluency , + complexity, + accuracy

interactive tasks

simple	**complex**
+ fluency , - complexity, - accuracy , - comprehension checks/clarification requests	- fluency , + complexity, + accuracy, + comprehension checks/clarification requests

Fig. 1 Effects of fluency,complexity and accuracy depending on task-types

It seems to be the case that increasing sophistication on tasks might allow for attention to be a relevant mechanism for more accurate task performance. The higher accuracy and complexity scores reported in Table 9.4 above, for the three task types at T3 would probably match with the reference established for the complex end of tasks. But it is also worth considering that while the complexity values in problem-solving tasks at Time One were at the lowest level of performance in relation to the other task types, fluency was at the highest level of the three tasks. When complexity values in problem-solving went up at T3, fluency values at the same time show that there was an

increase in pausing. These results lead to confirm the decrease of fluency performance with tasks requiring more explanatory power and complex language use.

GRAPHICAL REPRESENTATION OF SCORES

TRANSACTIONAL SCORES

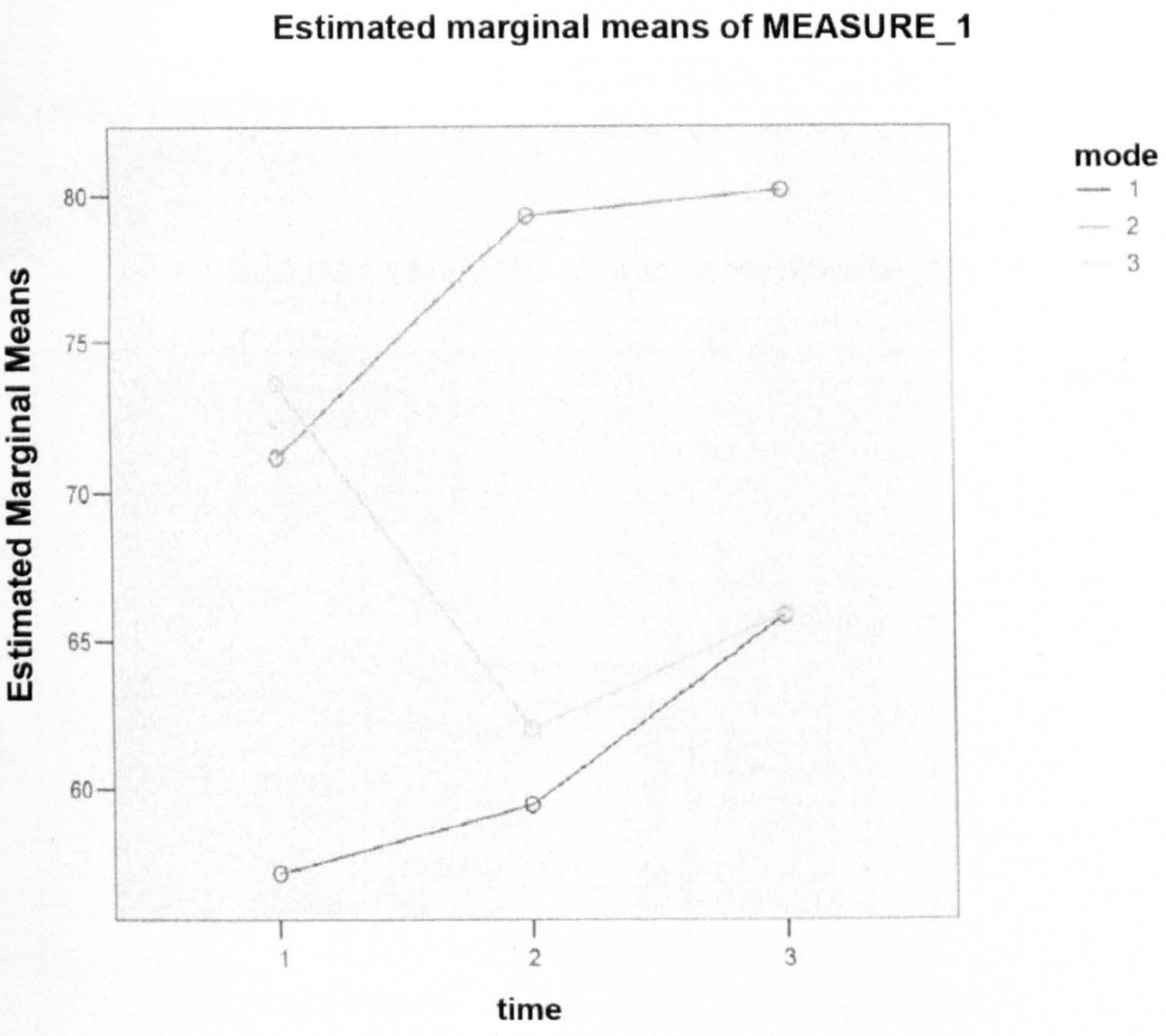


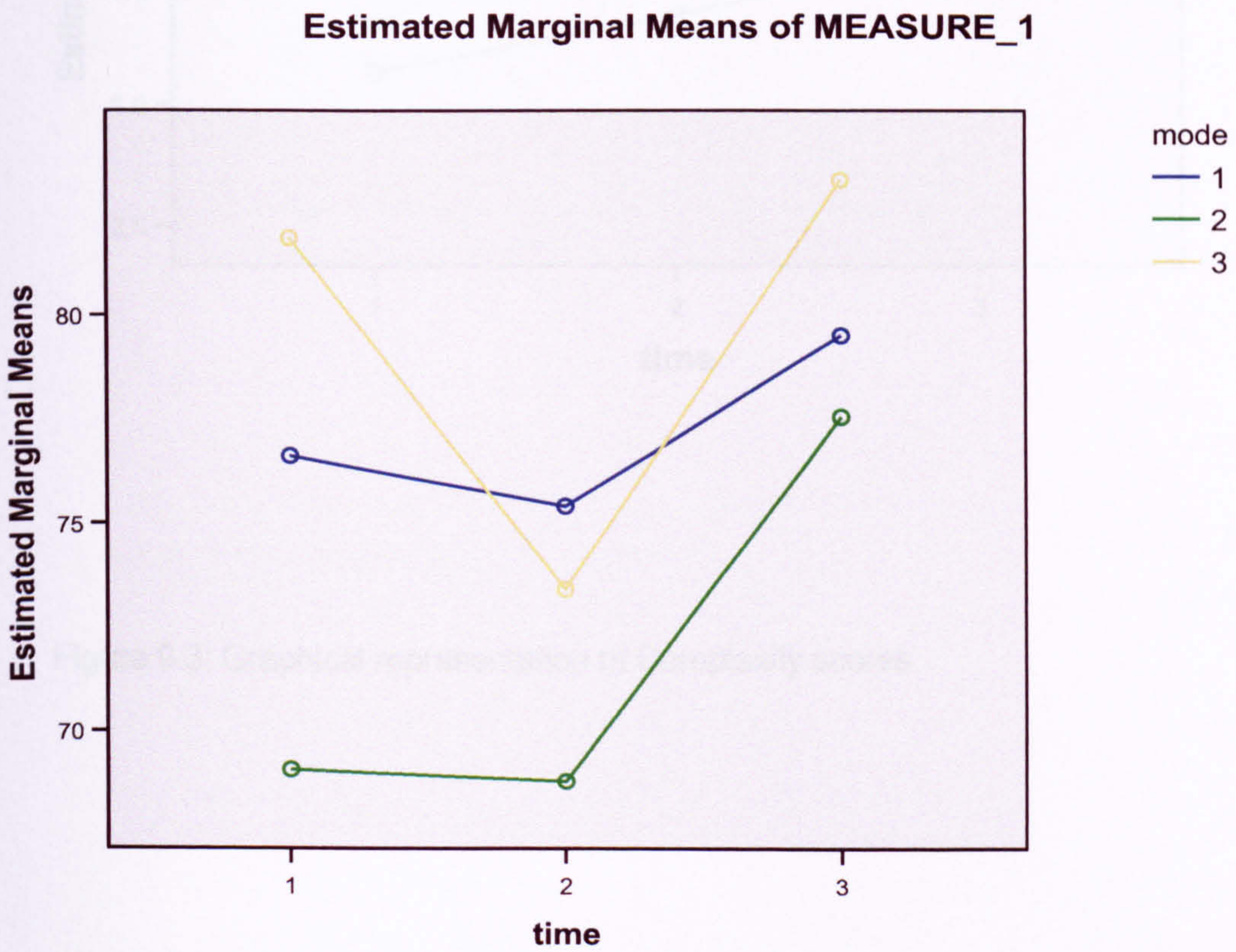
Figure 9.1 Graphical representation of transactional speech as percentage of all tasks over time.

The ratios reveal that there is more transactional speech as percentage of the group as a whole over time, which is indicative of more effective language use towards more successful task performance. These values appear to be contrastively more significant for description and even for narration, while

they are hardly significant for problem-solving. These values also indicate a consistent intertask variation for interactional language use.

The analysis of scores across tasks reveals that the group with more communicative problems at T1 seems to present a consistent drop of transactional language use in favour of interactional language use. The reduction of transactional language use seems to correlate with task difficulty but in some specific cases it also seems to decrease over time as a sign of conversational easiness.

ACCURACY SCORES



COMPLEXITY SCORES

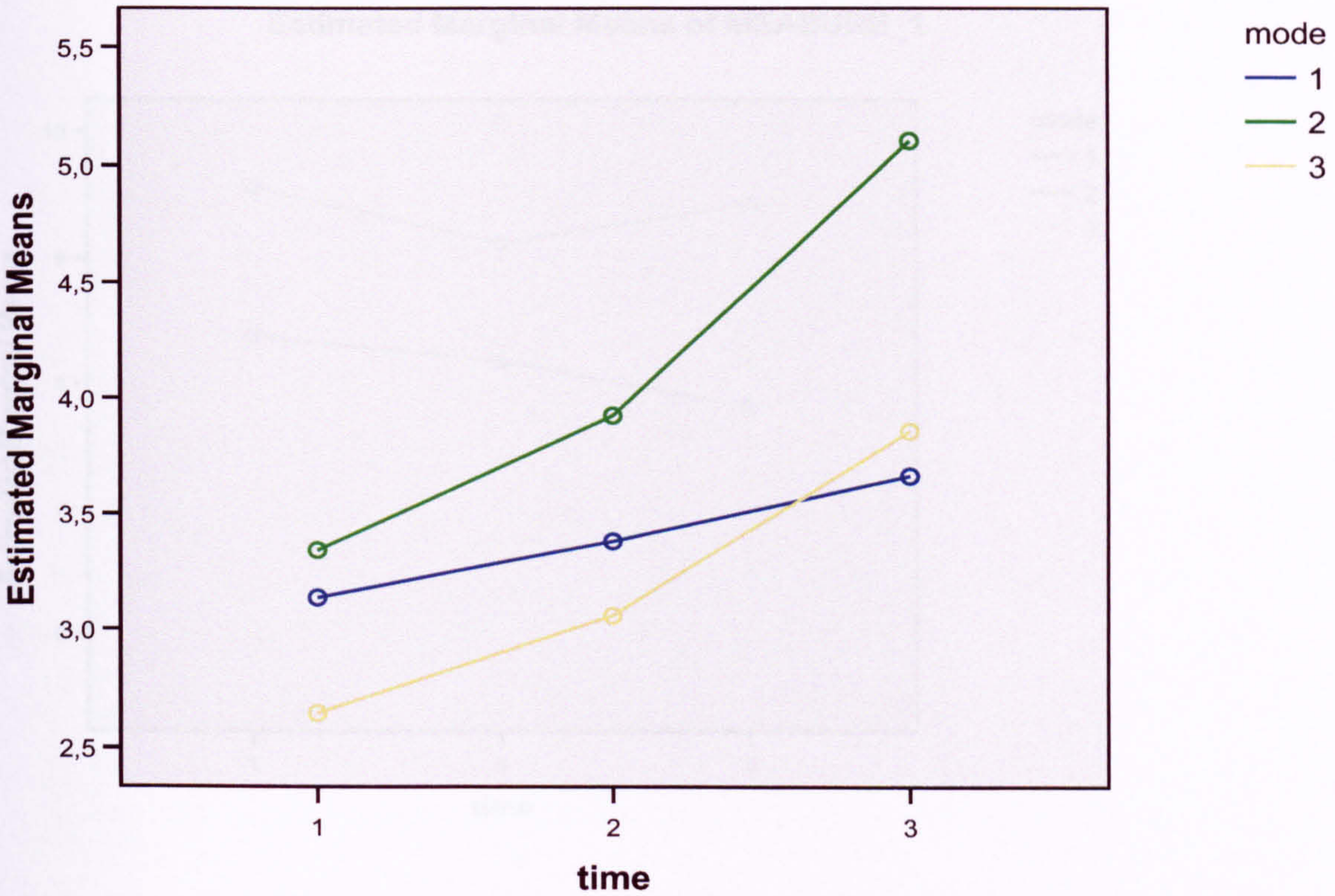


Figure 9.3: Graphical representation of Complexity scores

FLUENCY SCORES : PAUSES

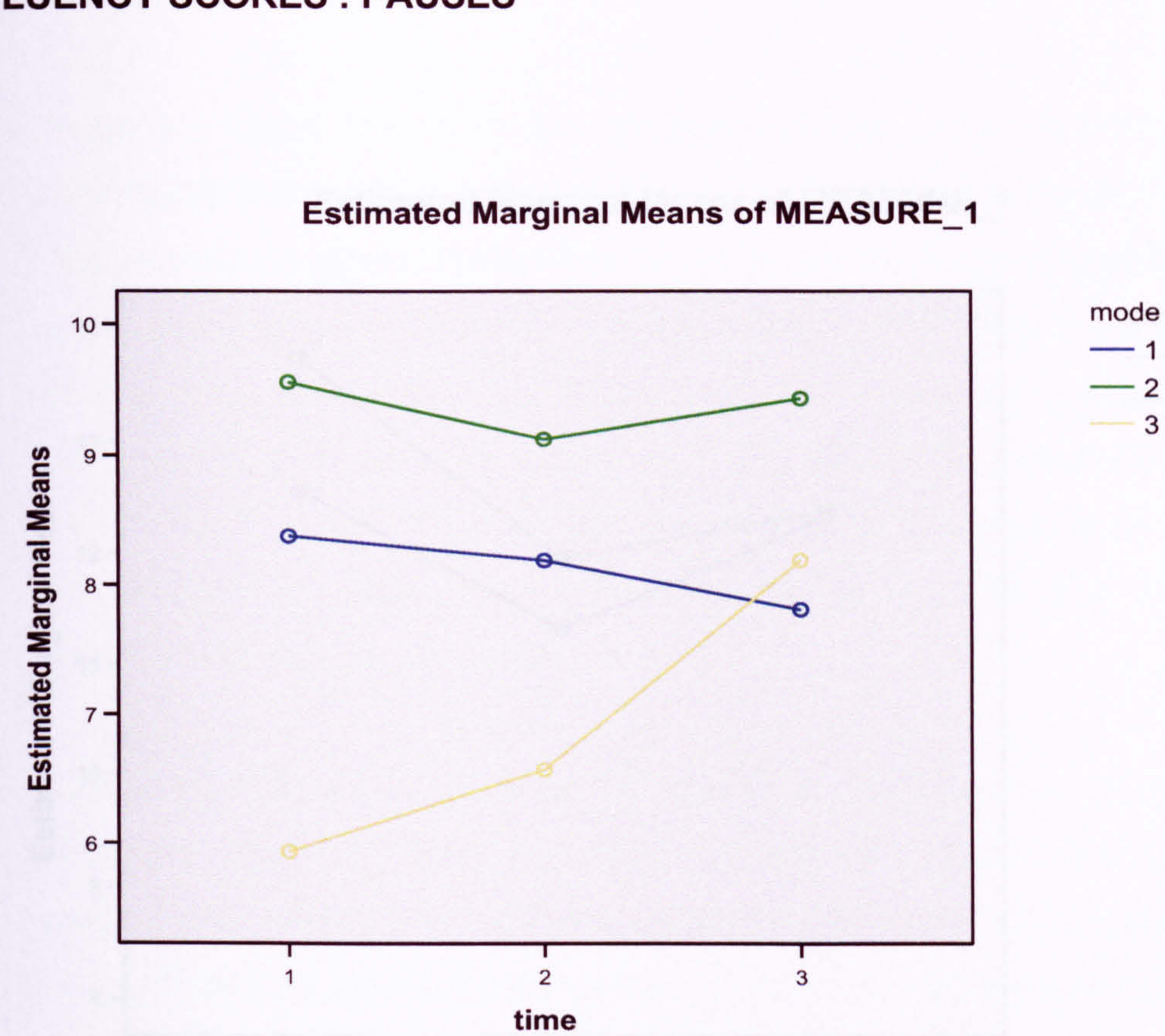


Fig. 9.4 Graphical representation of Pauses

FLUENCY SCORES : PAUSING TIME

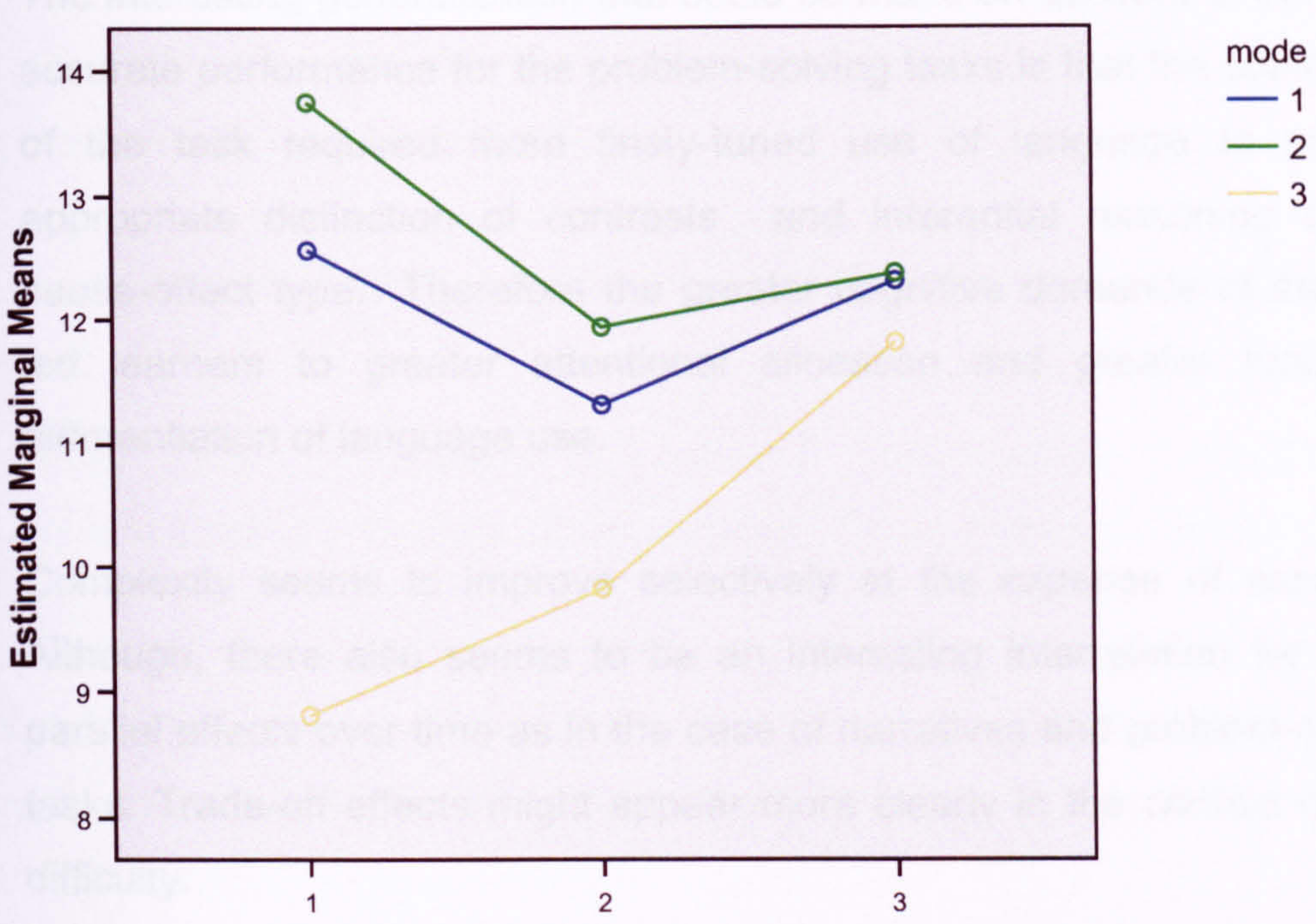


Fig. 9.5 Graphical representation of Pausing Time

Summarizing from the learners' performance scores characterized in this quantitative analysis, the following generalisations could be made:

a) The highest gain in complexity can be found in narrative tasks with problem-solving as the second highest very close over description tasks. Learners prioritized complexity over accuracy in narratives, because the narrative performance conditions of this research required character distinction, more control of deictic expressions, and more complex syntax

involved for locational shift and event sequencing , compared to description of objects or problem-solving.

b) Accuracy ranks first with the problem-solving tasks, second in the descriptive tasks and a comparatively close third in the narrative tasks.. The interesting generalization that could be made on account of the more accurate performance for the problem-solving tasks is that the complexity of the task required more finely-tuned use of language to provide appropriate distinction of contrasts and inferential reasoning of the cause-effect type. Therefore the greater cognitive demands of the task led learners to greater attentional allocation and greater functional differentiation of language use.

c) Complexity seems to improve selectively at the expense of accuracy. Although, there also seems to be an interesting interrelation for some parallel effects over time as in the case of narratives and problem-solving tasks. Trade-off effects might appear more clearly in the context of task difficulty.

d) Fluency results are in direct relation with the complexity of the task structure. The most fluent performance is found with narratives followed by description tasks and finally by problem-solving tasks. The amount of context support provided by the narrative structure perhaps influenced the more fluent production. Pausing values may relate to a learners' language capacity, but they may also vary according to task conditions and task demands such as processing problems and formulation of concepts. The interactive character of tasks may also disrupt fluency.

e) Transactional language use seems to be parallel in progression with conditions for the use of more complex communication. Interestingly enough, this gradation increases in parallel fashion in descriptions as well as in narratives, but decreases in problem-solving tasks, A possible explanation for these modulated results might be the fact that in dialogic tasks, interactional language becomes stronger over time.

The circumstance of coming only close to values of virtual significance in this study could be the result of dealing with a relatively small sample size. Although, the small number of students may be justified due to the longitudinal character of the study. But, on account of the trends that are perceptible in the research statistics, it seems that a larger group of students would confirm the idea that the pattern of results is in the direction of the prediction lines for this study

A QUALITATIVE APPRAISAL OF THE IMPLEMENTATION OF TASKS

One of the main issues in SLA research with important implications for theory and practice is ***understanding problem-management in learners***.

Speakers in general tend to spend some time negotiating meanings which are not immediately understood by their interlocutors but L2 speakers tend to spend even more time and effort struggling to cope with communicative shortcomings.

This study has undertaken the proposal that performance will not reliably reflect competence but will be the result of other processing factors operating from more functional knowledge sources.(Skehan 1998). The research considers the hytpothesis that for tackling the problem it is essential to consider how linguistic competence may be represented psychologically together with whatever processes might be implicated in its use. Concomitant to this is the belief that there are attentional devices to promote FL learning, aspects of information processing and factors that help promote fluency, accuracy and complex language use. The motivation to use differential tasks for on-line learner performance assessment concerns the central question of how these three areas correlate and what sort of impact is in competition between them. The scrutiny for learners problem-solving mechanisms while dealing with the tasks responds to the research interest in learners' communication strategies.

From a pedagogical perspective, the operational framework has put aside the idea that linguistic grading should be the ruling criterion for syllabus design, and the choice for a task-based approach is more valid to present communication problems comparable to real-life and takes a priority to assess the communicative outcome. This central role of achievement in task-performance provides learners with a more realistic view about the relevance of communication and allows them the possibility to transfer communicative skills to similar contexts in the real world. Real tasks involve cognitive processes which do not divide the language being used, but rather involve holistic use of language to enhance communication. These processes are more sensitive to SLA development.

Effective task-based activities are typically centred on engaging in the solution of problems, as opposed to activities designed as a context for the display and practice of linguistic items, labelled as 'structure-trapping' (Skehan,1998). Problem-solving activities engage learners in holistic use of language to perform objectives motivated by the task demands. Tasks which are scheduled in terms of increasing conceptual and cognitive demands gear learners' efforts towards a progressive exploitation of strategic behaviour and procedural skills leading to greater analysis, modification and restructuring.

Cognitively demanding tasks target more attention to input/output and noticing and facilitate rehearsal in memory (Robinson,2001). The learners' attention is directed by the greater communicative pressure to structural and conceptual demands of the new input. Task complexity becomes an indispensable ingredient for pushing processing efforts into interlanguage analysis, the incorporation of input, and the modification of output, all of which are necessary for language development and learning.

With the intention of expanding the area of problem management beyond the traditional scope of lexical retrieval and morphosyntactic gaps, this study has incorporated a perspective on learners' management of communication strategies upon discourse structure. The following analysis presents a comprehensive view of strategic use in the context of the three task-types.

AN ANALYSIS OF TASK EFFECTS

The tasks in this research present tactical variations centred in the requirements made by the three different discourse mode to modulate complexity demands in the performance of subjects.

The first task challenge was built around the description of objects.

Description tasks required from learners to direct attention to particular objects with "special " characteristics. Specific concentration on the language forms of a catalogue. advertising products was required from learners to explain objects and support their choice. Decision-making was probably motivated by two factors: a) the utility potential of the product, which is related to real likes or dislikes and b) the processing difficulty encountered by the subject in understanding descriptive information. The degree of complexity of the task depends both on the characteristics of the object chosen by the speaker, and the degree of conceptual difficulty entailed in its functions.

Learners in this study cope with complexity in descriptions by various means. They anchor meaning through *a semantic network, which is strongly centred on analogy*. In the face of lexical shortcomings and lack of clear labels to refer to these devices, lexical clues are provided to approximate meanings to interlocutors by focusing attention on key aspects of the way these devices function. The strategic resource reconstructs a mental schema of objects based on the way they work. A cognitive construct, which is shaped around a discursive structure proposed by Hoey (1991) as the problem-solution structure was instrumentalised to map learners' efforts for organising messages.

The same task structure was basically maintained, with slight variations, at the three points over time. At Description T2 the attention of the learner was directed at organising the information towards the positive or negative aspects of the object chosen. This was intended to provide a sharper focus for the task. But at Description T3, the more technical character associated

with the function of the objects probably introduced more complexity to the final stage. The number of functions of the object involved in the description task is directly related to task complexity. The more functions in the object, the more complex the task. This requires from the learner specific efforts to extend cognitive resources and multiply language strategies.

The subjects paid special attention to **building up cohesiveness** in their descriptive discourse. This was articulated in the information framework via ***strategical repetition*** and most effectively through **reformulations.** The amount of reformulations involved in the communicative effort was proportional to what the speaker considered to be relevant for the purpose of clarity in communication. If the information was considered to be irrelevant or secondary to the point being made, speakers appeared to devote less effort and the principle of economy would prevail. In general terms, subjects tended to maintain a reasonable balance between redundancy and economy in communication.

The second task type was presented through a picture story to motivate narration.

Narratives are a manifestation of language communication like any other, requiring a story-teller and a listener. But they contrast sharply with descriptions in that they require a specific ability from the narrator to refer to things and events that are removed in space and time. Events, which happen sequentially in the context of some state of conditions, involve a group of characters with specific traits, in locations and presuppose an evolution leading to some transformation or change. In addition to these different layers of elements and relationships, the narrator usually intervenes with his/her perspective or 'point of view' to present these different layers of elements and relationships which constitute his/her version of the story.

The main processing criteria to operationalise the essential narrative structure depends on the narrators' communicative experience of prior events and their organisation. One of the potential problem areas for narratives is

maintaining character reference under control. Some problem areas provoke more communicative stress than others due to crossings from different information sources. Other problem areas are related to location and time-shifting. Parallel actions implying character distinctions, at specific places, and at a given time require complex information-processing and multiple attention both from the productive and the receiving end. Clarity is provided by keeping a virtual stage by stage account of episodic development. Repetitions continue to be used to mark important strategic areas of the narrative framework that lead to logical changes and outcomes. These 'trouble-shooting areas' allow for opportunities to use 'cutting edge' interlanguage and motivate strategic behaviour directed towards constructing narrative discourse in an effective way

Learners offer very specific stylistic variations interfaced with the cognitive factors which condition the quality of the story. Good narrators get more "emotionally involved" to provide some sort of *a dramatic tone* to the story. The analysis of learners' performance throughout the three tasks seems to suggest that this narrator's involvement does not depend on more or less developed interlanguage but rather on aptitudinal factors.

Story-telling demands important details related to events so the situations which are central for understanding are adequately interpreted. In this respect, exchanges are controlled by a question of relevance, details being required for clarity and discourse editing for accuracy.

Most narrators organise events in a story in an order of climactic transition. In many cases when cohesion resources are scarce, the narrative is more clearly framed as a 'problem-solution structure' by introducing the initial situation which derives into the main problem, and then into the denouement, which is analogized to the solution. This strategy provides alternative detectable links for tracing the story.

People get better over time at narrating because there is some intuitive competence in relation to story telling. It is merely a process of ranking or

ordering things that we do all the time in all sorts of activities, making rational decisions about what things need more attention, given the limited resources of time and language

Analyzing narrative language provides information not only about how stories are told, but also about how experience is organised. The narrator's involvement in the narrative event is expected to reveal patterns of the speaker's more vernacular rather than formal style which is tightly interspersed with the narrator's ways of thinking (Bruner,1986), beliefs and ideology. Narratives reflect, then, a competence-centred perspective from the language user which entails internal rules of logic and experiential organisation. In this way they represent a structural representation which moves between cognition and culture (Schiffrin,2003).

The third task challenge was built around problem solving tasks which developed progressively over time into more complex problems.

The major source of information in problem-solving tasks is, once again, knowledge of the world and experiential knowledge. Due to the nature of these problem-solving tasks, which are more visually challenging, there is a gradation of problems to be spotted. Errors have been manipulated to create more perceptual difficulty for the problem-solver and hence additional complexity to the task.

Cognitive difficulty, which is a significant characteristic in the design of the tasks, has important implications for supporting the hypothesis that complexity contributes to more attention and concentration during task completion,

Negotiations are more effectively present in these problem-solving tasks than in the description tasks due to the stronger dialogical nature of decision-making activities. Narratives, which are more monological in character, require less negotiation in discursive terms. Problem-solving procedures in these tasks require extensive spotting of incongruities, a circumstance which

imposes contrasting concepts and triggers more inferential reasoning. These ideas need to be articulated with complex messages which motivate quicker turns. Quick exchanges of transactional utterances appear together with interactional comments to provide an idea about the learners' anxiety to convey agreement or discrepancy. Statistically speaking, these exchanges counterbalance the amount of transactional language use and include more extended negotiations.

Learners take common pathways for organising discourse when coping with all three task-types. Specific aspects such as reference provide the circumstances to implement similar verbal resources across tasks. Learner performance also reflects that combination of the two lines of communicative intentions present in most speakers, an ideational one and an interpersonal one. The kind of interactional language generated with this particular type of problem-solving tasks is built around personal images and emotional reactions which are especially important in decision making. The visual factor becomes particularly effective in these tasks as an attention–catcher as well as a vigorous stimulus for capturing images and activating emotions. Emotions play a decisive role in decision-making and should therefore be given appropriate importance in most task-oriented activities.

STRATEGIC BEHAVIOUR

Learners seem to cope with on-line communication by activating strategic processes which help accommodate their basic linguistic resources to convey the rhetorical requirements of the tasks. These processes, which have been extensively researched (as reviewed in Chapter Three) involve specific learner problem-solving mechanisms. These mechanisms have been distinguished in the classical literature on learner-centred resources as either, learning strategies, which deal with the receptive domain of intake, memory, storage, and recall (O'Malley et al.,1990), or communication strategies, which belong with verbal and non-verbal mechanisms for the productive communication of information. In reality, it becomes difficult to distinguish

between the two since comprehension and production occur almost simultaneously, and retrieval of on-line resources is obviously connected with the activation of skills and lexis already stored in the interlanguage system.

Strategies have sometimes been referred to as 'good', 'effective', or 'successful' and the converse. It seems, nevertheless, that with few exceptions, strategies themselves are not inherently good or bad, but have the potential to be used effectively. The successful completion of some tasks may require the use of a variety of strategies used repeatedly; the successful completion of others may depend on the use of a more limited number of strategies. Empirical research on strategies has shown that what could be considered as a specific strategy can have more than one function. However, strategies still seem to be more specifically oriented towards the one overriding function of bridging the gap for communication breakdowns. What seems to be useful in strategy research is to try to identify which strategies are actually recurrent in learners' performance and the characteristic role they accomplish.

Strategic behaviour seems to have played quite a significant role in sorting out conceptual as well as formal problems in the three task-types implemented for this study. The most typical strategic resources to present information are based on ***'world-knowledge'***, which serves to bridge gaps at the underlying cognitive level (Kellerman et al,1987).

At the discourse level, which is central for the purposes of this research, learners seem to activate certain information schemas similar to Hoey's "problem-solution structure". Learners provide a very basic discursive framework enunciating a situation which contains a problem. The message contains basic information retrieved from world-knowledge which conveys 'a general state of affairs', in Winter's (1986) term, shaped around a schema which Hoey proposes as ***the problem-solution structure*** (Hoey,1982). This strategy appears to be quite resourceful across tasks and over time. Even learners with more limited resources manipulate this cognitive construct as a discursive tool to organise information details. The generated sequence creates

a general mental picture for guiding interlocutors and reducing potential lexical or syntactic problems while discourse is being processed.

Redundancy works concomitantly with the problem-solution strategy. This strategic tool operates for conceptual reinforcement through *repetitions* built around concepts or ideas which are judged important for the interpretation of the state of affairs. The strategic use of repetitions also functions *formally*, by ***constructing cohesive devices*** to put discourse together. This resource is quite recurrent in the research sample, both task-wise and time-wise, and entails lexical substitution, syntactic paraphrasing or circumlocution.

The problem-solution structure intersperses with ***the maxim of clarity and economy***, which allows language learners with extra processing space to cope with on-line production. Speakers adhere to both of these principles via use of *compensatory strategies* (Poulisse, 1997). Reference is generally established in the most economical way possible, and more information is added, in a gradual and continuous way, only if the communicative goal is not reached.

Economical turns and the dynamic flow of the exchanges evidence that such strategic processes take place. These processes are activated as short-cuts to produce *reduced* versions both at the syntactic and the discursive level. They are implemented either to articulate a descriptive function, construct a clear time framework for narratives or develop a logical line of argumentation for problem-solving.

Interactive negotiation of meaning seems to play an important part in dyadic task performance. Speakers do take into account their interlocutors' resources when activating their strategic competence. They seem to operate with the assessment of world-knowledge and the sorts of culturally-based information at their disposal. All of which seems to have an important bearing on the choice of strategies for overcoming problems.

Strategic resources were usually activated in a tandem-like fashion. They were triggered simultaneously by the speaker's awareness of the task complexity and the interlocutor's prompt feedback of communication gaps. Error-corrections or repairs were virtually motivated by the interlocutor's signaling of how disruptive the error was and the requirement for clarity of communication. Alternative strategic paths, supplied additional cues for clarifying misunderstanding or enhancing comprehension. The noticing function of output (Swain, 1998), then, was not restricted to focusing attention on incoming input but also helped learners to reprocess their output for greater message comprehensibility. The harder the problem, the stronger the activation of resources to cope. The systematic presence of strategic devices activated as problem-solving shortcuts provided the best attempts for managing effective communication.

If we are concerned with instantiating effective and varied ways for achieving progress and development in language use, the call for the implementation of a variety of tasks which are communicatively challenging is more or less evident. This study has the shortcomings proper of new areas of development and limited decision-making time at certain points of the research process. Results are not always conclusive, in the sense that learners in the requirement to complete the tasks seem unable to equally prioritise fluency, accuracy and complexity in their performance. But there is more or less clear support for evidence that task structure has specific effects on accuracy and complexity and that different tasks have different effects on performance. Participants seem to channel their resources into either accuracy or complexity depending on the attentional demands of tasks.

Task-based activities encourage learners to reconstruct communication collaboratively and challenge their minds to solve problems via negotiations. They also contribute to help learners with a practical opportunity to identify knowledge gaps in their IL performance and to consolidate their language use leading to sustainable development.

CONCLUSION

The motivation for this research study is centred in the realization, after years of EFL teaching to adults, that older learners are aware of the fact that they can exploit their cognitive resources and achieve reasonable successful communication without syntax. One major problem for language teachers interested in the communicative side of the teaching experience has been to resuscitate concern for language form without compromising real communication.

Pedagogical perspectives have historically travelled from an emphasis on lexical items and collocations, grammatical structures, and microskills, to communicative skills. Syllabus designers have strongly believed for many years that by synthesizing parts of the language system to which learners are exposed, these parts would be finally put together in the learners' mind for real-world performance. Reality has revealed a more generalized different outcome.

Task-based approaches have come up with the interesting offer of exposing learners to target language form in the context of communicative opportunities about real-world situations. The advantage of this perspective is that tasks do not divide up language but involve holistic use of language to perform activities. The problem to be distinguished, in principle, is to establish some basis for task sequencing decisions as well as methodological procedures for focusing learners' attention on form.

Prabhbu (1987), a pioneer in research into task-based teaching , has somehow transmitted the common sense criteria that tasks can be made more complex by increasing the amount of information in them but also by changing the reasoning demands of tasks. In line with observations of Widdowson (1990), Johnson (1996) Long (1998) and Robinson (2001), there is need for more research into a framework for analyzing pedagogic tasks into their cognitive 'constituent features' so they can be arranged in an order of 'increasing complexity' for the learner.

For Robinson (2001), 'a corollary of this approach, then, is the claim that scheduling tasks for language learners in terms of their increasing cognitive complexity will facilitate the 'means' of language learning, and therefore lead to a transition in learner's knowledge states.' There are two motivations for Robinson's claim: (1) the communicative consequences derived from increasing cognitive and conceptual demands of the task which may lead the learner to push *output* (Swain 1985,1995);(2) the functional requirements of tasks (Givon,1985) which are implicit in the fact that in many cases increasingly cognitively demanding tasks will make increasing functional demands on the learner with its corresponding linguistic consequences.

The communicative consequences may be induced by internal feedback of learner's self monitoring and correction, or external feedback caused by interlocutor's clarification requests or comprehension checks. The functional requirements of more complex tasks should lead to more pushing of output, and analysis of IL than simpler counterparts.

Tasks which are based on interaction and negotiation seem to be sensitive in leading the learners to the psycholinguistic event of noticing , or focusing on specific aspects of linguistic forms, the first step towards change. The degree of negotiation of meaning may vary significantly. Foster (1998) has found that the social context of the ESL classroom may promote little negotiation of meaning and many learners working in dyads doing tasks with optional or required information exchange, either speak very little or do no negotiated interaction at all.

Dialogic tasks may have cognitive consequences for modeling language use. Trying to come to a shared solution or adherence to the most coherent solution might contribute to use language in a more intelligible way. This sort of strategic "grounding process" might explain the presence of more interactional language use with collaborative tasks.

In this sense, while interactive task-based activities stress negotiation for meaning as the most effective way of getting learners to focus on form

(Gass,1997), other task-based activities stress clearly a cognitive dimension on complexity which needs further research. One of these variables is related to planning time. When learners are allowed time to think and organize their performance of tasks there is evidence of gains in accuracy and complexity. There seems to be a better command of tense forms on planned narratives (Ellis, 1987) a trend for more complex syntax on planned vs. unplanned information gap tasks, and increased accuracy on tasks contemplating planning time (Ortega,1999). Foster and Skehan (2001) have found that planning time systematically leads to manipulate attention, targetting the three goals of fluency accuracy and complexity to maximize the chances of language development. Interestingly enough there also remain some of the pedagogical activities proposed by Bygate (2000) implying repetition of similar tasks to provide a structured context for the mastery of form-meaning relations.

There remains a good deal of research study to be done for documenting the impact of social factors on psycholinguistic processes of acquisition and its implementation for more effective activities for learners in the classroom.

In summary, research into the effects of task complexity seems to be an extremely productive area to concentrate on, if we are interested in the consequences for effective theoretical proposals concerning learner language development in SLA. Those proposals may have an extremely important incidence in foreign language pedagogy because they entail decision-making about sequencing and selecting tasks for language learners.

One final point requiring attention is the need to engage in more longitudinal SLA research to bridge the gap between ongoing performance and learner development over time for making sustainable claims and predictions for effective language learning.

Many issues in this research still remain untreated, but others which have been raised will, hopefully, contribute to stimulate pertinent issues in relation to our understanding of task-based instruction and FL development.

APPENDIX

STAGE ONE: DESCRIPTION (a)

Computer know-how to help you beat the bookies.

The Race Track Computer uses a microchip processor to assess the entire field in a race and rates the horses most likely to be first past the post. You simply need to input the horse's past form, the weight – given in the daily newspapers – and rate the jockey, the processor does the rest. The Race Track Computer was developed by an American computer science engineer with a passion for horse racing. Tests in the States have shown astounding results. With a modicum of luck it may pay for itself within days.

DG1041 Race Track Computer **£14.95**

The everlasting address book

An address book from Omega that will last for a lifetime. Bound in leather, it has unique plastic loose leaf pages so that obsolete addresses can be deleted with a damp cloth. It comes complete with its own water soluble pen and can be discreetly personalised on the inside pocket.
Personalisation: Up to 3 initials.
Wipe Clean Address Book
£19.95 BM2126

13

Sea-Band – the new answer to travel sickness.

It's a simple wristband to look at, but its invaluable qualities rely on the wrist's acupressure point (the Nei-Kuan point to be exact). It is there that the wristband applies its carefully controlled pressure. The result is effective nausea control for sufferers from all forms of motion sickness without causing drowsiness or other side effects. It has also been effective in other conditions that produce nausea such as pregnancy. It is completely harmless and may be used by adults and children. The Sea-Band was tested by a Royal Navy ship's doctor last autumn in the South Atlantic: his report validates the efficiency of the product. One size fits both adults and children.

FC1103
Sea-Band (pair) **£7.95**

D-I-Y Magic Eye senses hidden wires and pipes.

In every wall, under every floorboard, there could be live cables – drilling them would result in a nasty shock – or water or gas pipes – drilling them could flood or intoxicate your home. If there are hidden hazards, The Protector will find them. Simply scan the area you wish to drill or screw into; pipes or other metal objects will sound a constant buzzer and live current will set off the LED flasher and an intermittent sound alarm. 'PP3' battery not supplied.

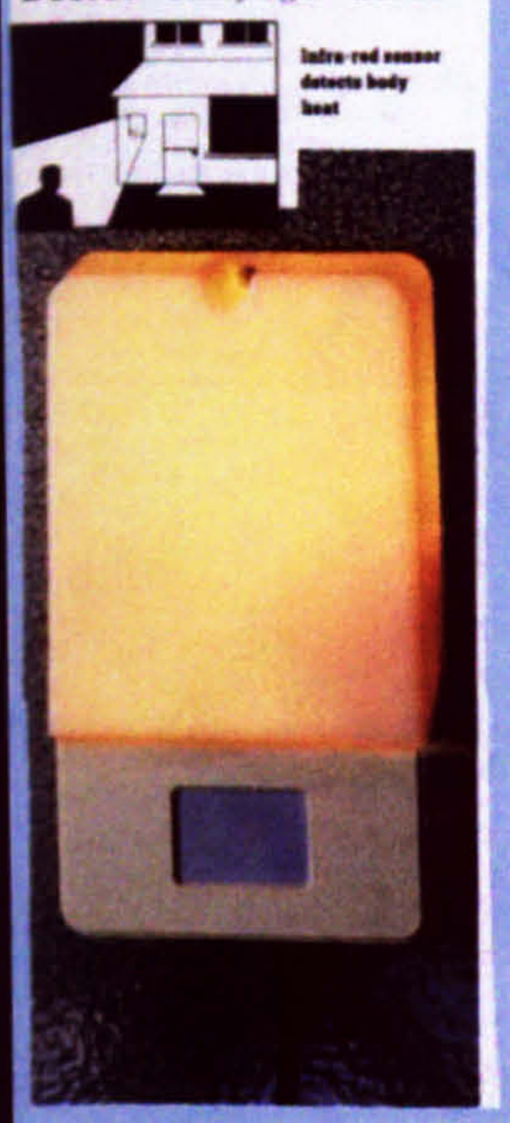
AA1121 The Protector **£9.95**

STAGE ONE :DESCRIPTION (b)

Infra Red Sensor triggers Sentry Light as you approach.

The heat-sensitive Sentry Light is designed to greet you on a dark night – or to deter intruders. Simply mount it on an outside wall and its electronic sensing device will detect changes in temperature created by the body heat of anyone walking into or out of a 70° fan-shaped area within a 10 metre radius. Once activated, the light remains on for approximately 2 minutes and then switches off automatically if no further movement is detected. A sensor prevents unnecessary operation during daylight hours. It's cheaper to run than all-night lighting and is more likely to deter intruders. Housed in a robust ABS plastic enclosure, the light operates from mains supply, using a standard bulb.

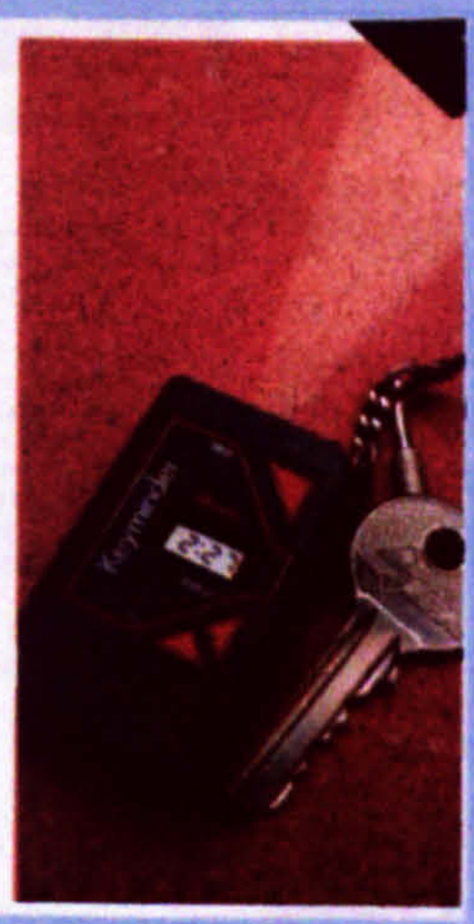
DT1086 Sentry Light **£49.95**



New Electronic Key Minder sees in the dark.

The problem of mislaid keys was solved by the Key Finder that emitted a series of unmistakable electronic bleeps when you whistled. Fumbling around for locks in the dark was solved by the Key Ring Light that cast a powerful beam of light onto the keyhole at the push of a button. Now there is the Key Minder which performs both functions – and also has an LCD clock that gives both time and date. The sound waves of your whistle will activate the bleeper up to 10 metres away – even whilst your keys nestle in a pocket or at the bottom of a handbag.

CG1044 Key Minder **£6.95**



Car Cover

Most car covers are heavy and cumbersome. And especially difficult to store when not in use. This nylon taffeta cover will keep your car dry but will store away neatly into its own small zippered pouch. All the edges are fully hemmed to prevent fraying, and the corners are elasticated which will keep it firmly in place. Being nylon, it's extremely light and easy to put on or take off. Four sizes available to fit all standard saloons. Please state size required: (SS)11'–12' length car, (MM)12'–14', (LL)14'–15', (XL)15'– 16'.6". **Car Cover £44.95** GA789

Quiet nights with Baby Shh!

We've been watching scientists develop this, and it's now available for the first time. The Baby Shh works by reproducing the natural soothing sounds of rustling leaves and distant waterfalls to send babies back to sleep. Extensive clinical tests have proved it stops most babies crying quickly and often instantly. A wonderful help to harrassed parents, it can weave its soothing magic on babies up to 8 months old. Battery operated, it is safely contained in an attractive shell-shaped case.

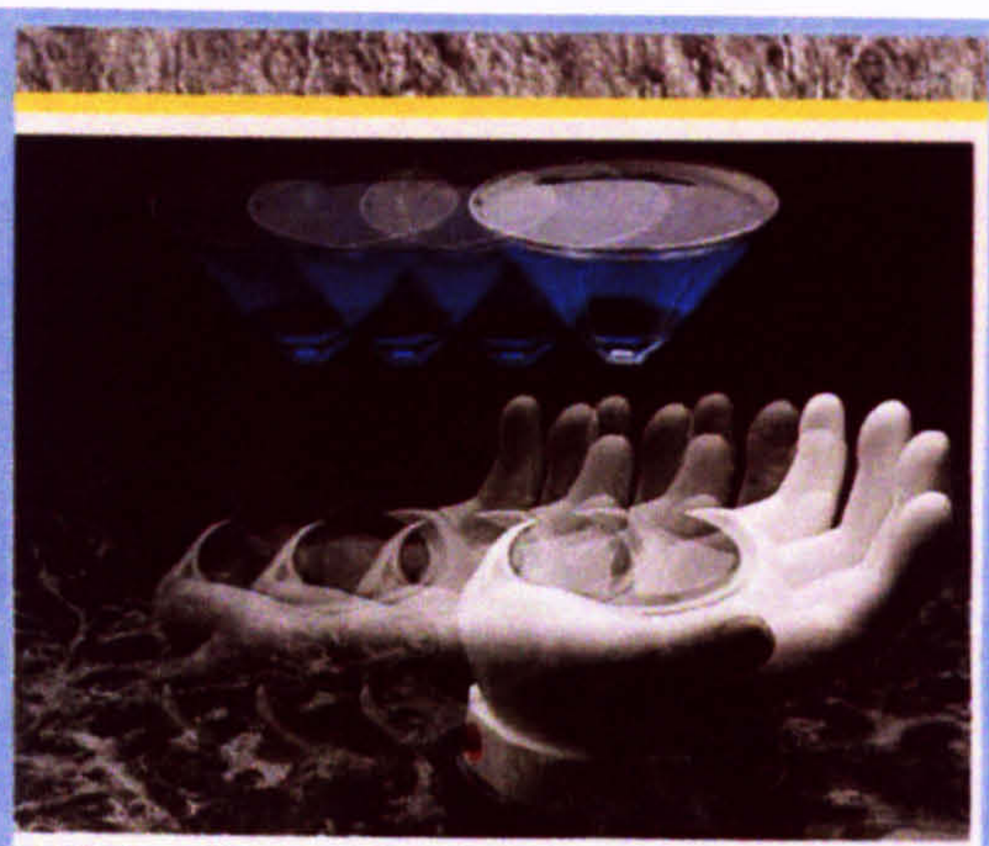
Baby Shh £14.95 EP2113

STAGE TWO: DESCRIPTION (a)

Hands-free phoning

Simply place your handset next to this cordless amplifier for totally hands-free 2 way speech. A useful gadget which leaves you free to take notes and allows others in the room to participate in the conversation. And if you're hard of hearing you'll find it a great help. Batteries not supplied.

Telephone Amplifier Ivory
£9.95 BT2029
Telephone Amplifier Black
£9.95 BT2030



Thanks Jeeves! Here's a real helpful hand – your very own battery operated Cocktail Butler. Just place a glass (full, of course) on the white-gloved butler's hand, and watch your friends' amazement as it glides across the table – believe me, it stops just before the edge every time and doesn't spill a drop! A great piece of fun. (Batteries not included).
SK73D Cocktail Butler **£9.95**

The Living Sculpture A unique blend of science and art – no-one can resist The Lightning Sphere. I have seen similar items on my travels overseas, but they have been far more expensive than this one. The Lightning Sphere is a unique phenomenon created by electronic impulses that react with rare gases inside a glass sphere. You touch the glass and lightning gathers brilliantly around your hand, responding to every move you make with vivid flashes, a stunning visual spectacle everyone can enjoy. The Lightning Sphere is completely harmless, a living sculpture that brings all the power of nature into your home with dazzling effect. Mains operated, it stands 11" high.
MZ01D Lightning Sphere **£199.95**

The anti-theft device that no-one could crack.

At last year's Motor Show, the manufacturers of this remarkable car security device offered a £500 prize to anyone who could beat it. Over a thousand people tried – all failed.

The Cannon Anti-Theft Unit is an *electronic immobiliser* that fits into your dashboard, and measures just 2"x2½". Before the vehicle can be started, you simply tap in a personal 4-figure code that's unique for each device. Wrong code? No code? The vehicle simply won't start.

There's no lock to pick or break, no alarm for passers-by to ignore (or complain about). Until you tap your code in, the only way to move your car is to tow it away. Even if a thief tries to hot-wire the ignition, he'll just trigger the car horn. The Cannon unit is approved by the AA, is easy to fit yourself, or cheap to have installed at a garage – it takes around an hour. It comes with full instructions, a screwdriver and a terminal block. With 1,000 vehicles stolen every day, it provides both security and peace of mind.

Cannon Anti-Theft Unit
Code CMATD1 **£24.95**

STAGE TWO: DESCRIPTION (b)

A bed on a shelf

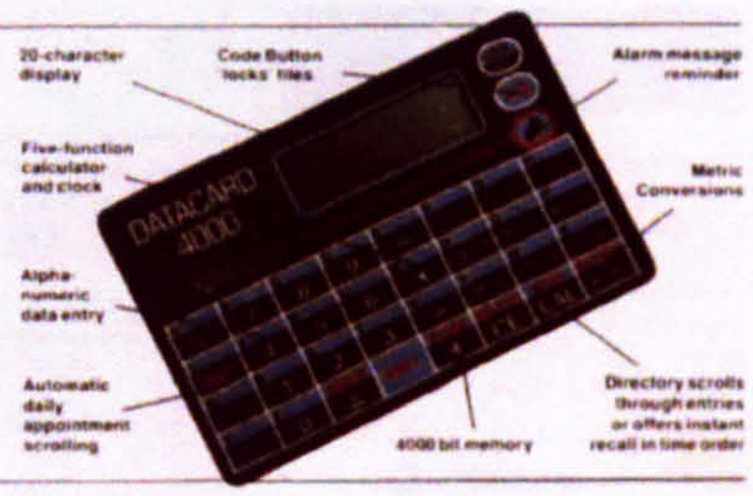
If you need an extra bed, and don't have the space for one, there's now a sensible alternative. Deflated, this bed folds into a carry bag (18½" x 22") for compact storage. When guests arrive it quickly inflates using the special adaptor for your hair dryer (cool setting) or vacuum cleaner. The special tubular cells make it comfortable but firm, and the soft velour fabric finish will stop blankets slipping.

Single Inflatable Bed £19.95 DG2132

Double Inflatable Bed £29.95 DG2133

Datacard 4000 Now there's a tiny personal organiser that will keep track of all the information you need in its 4000 bit memory bank. It's a diary, an address and phone number index, a money manager, a shopping list, and much much more. And the Datacard 4000 even incorporates an ingenious time management system that's programmable up to a year in advance; it can call you daily and scroll up appointments and reminders, or be set to call weeks or even months in advance with up to 20 alarm programmes available. As if that wasn't enough, Datacard 4000 is also a full-function calculator and a metric converter – it even features a security lock to help keep information confidential. Full instructions, a carry pouch and a long-life battery are all supplied.

VC86D Datacard 4000 **£19.95**



Jetblast that dirt away

If you've found that your ordinary hose doesn't dislodge thick dirt, then Jetblaster is the answer. A high pressure cleaning system that attaches to your garden hose, it gives you the power to clean at many times normal water pressure. Ideal for cars, patios and gutters, its 11-way adjustable head means you can reach all those hard-to-get-to places. It features a translucent soap reservoir with three flow settings, and comes complete with a 24" extender to increase overall length to 40".

Jetblaster £14.95 DG2120

All you need is the air that you breathe ...

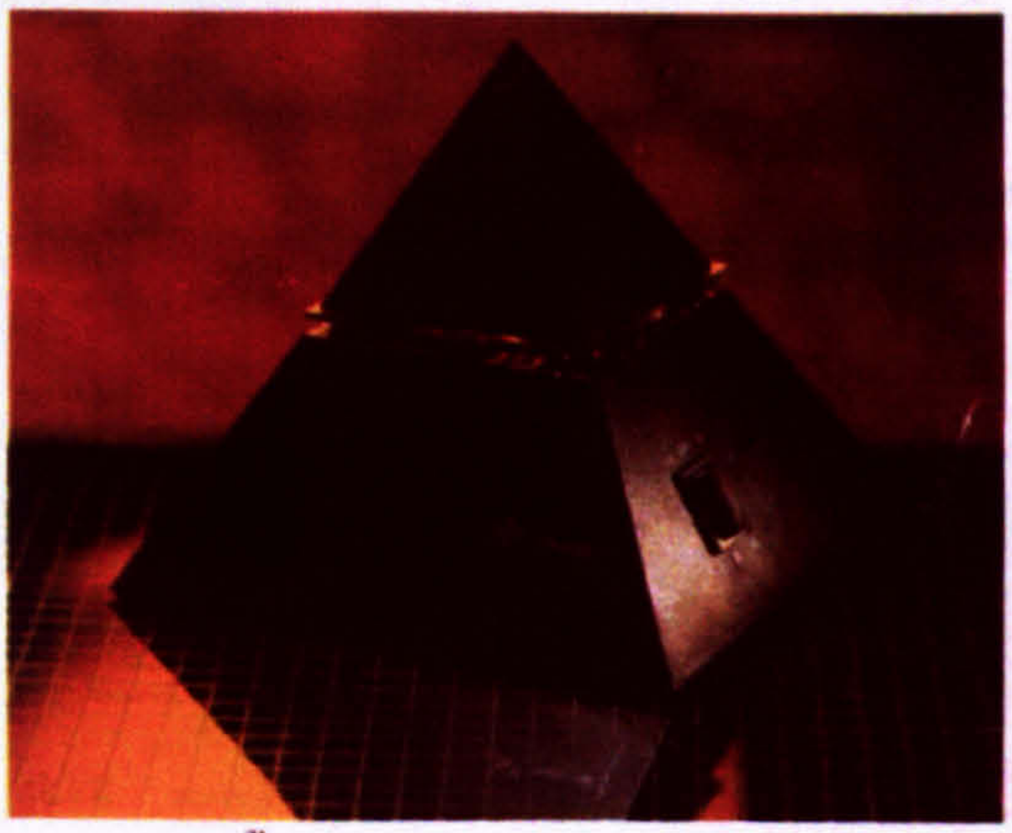
Why do you always feel so invigorated by running water or after a storm? It's because of the electrically charged negative ions in the air. Yet central heating, artificial fibres and metal surfaces all produce their opposite – positive ions – which make you feel lethargic and heavy.

The Amcor Ioniser redresses the balance, silently producing a stream of negative ions – which also help clear dust, cigarette smoke and pollen from the air. It's even been found to help alleviate both hay fever and dust allergies, and similar units have been tested in hospitals to reduce cross-infection.

We selected this unit for its high ion output, and its stylish pyramid design which creates a fascinating talking point, and emits negative ions in four directions.

Mains-powered and consuming little electricity, the Amcor comes with a free ionoscope to measure ion output.

Amcor Ioniser Code AMION1 **£39.95**



STAGE THREE: DESCRIPTION (1a)

The unique lighter with no flame, no flint, no batteries...

It's also 100% windproof! The Boston cigarette lighter is a unique creation: an elegant gold-plated cylinder that measures just under three inches, and has no moving parts.

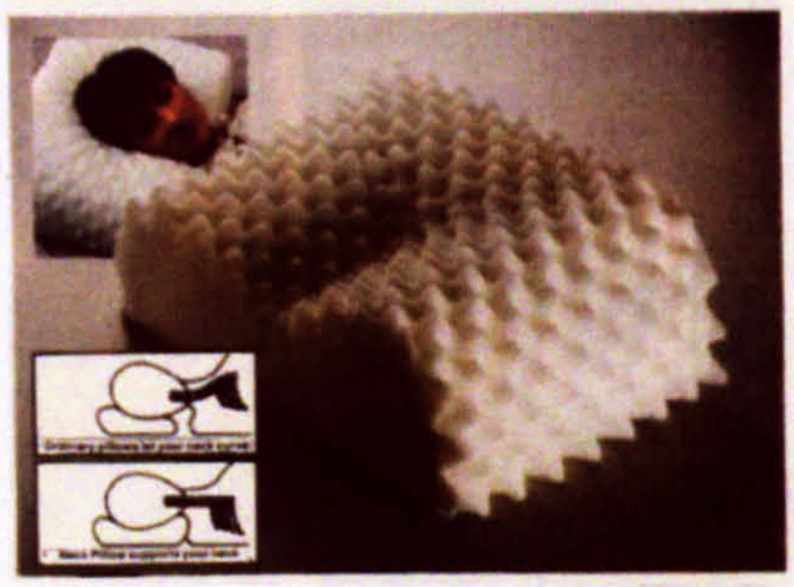
To light a cigarette, simply place its tip on the metal gauze inside the lighter and inhale. Air is drawn through a methanol-soaked pad, activating a catalyst – which causes the gauze to glow red hot, and to light your cigarette.

When you need to refuel, simply dip the pad in the airtight methanol container supplied. It contains enough fuel to last a 20-a-day smoker almost 12 months – and refills are readily available at tobacconists.

Stylish, safe, and completely child-proof, the Boston lighter makes a fascinating talking point. And an ideal gift.

Boston cigarette lighter
Code BOCGLI **$17.95**

The Neck Pillow Here's a pillow designed to give you a good night's sleep simply by correcting the resting posture of your head and neck. Ordinary pillows can force your spine into an unrelaxed shape: this Neck Pillow has a hollowed-out shape that helps distribute the weight of your head and neck. It's made from 3 layers of multi-density foam which give you support just where you need it, and is luxuriously comfortable, tailor-made for a restful night. The Neck Pillow fits into a standard pillowcase and is encased in a zipped polycotton cover.
TS85D The Neck Pillow **£29.95**



STAGE THREE: DESCRIPTION (1b)

A Lot of Fresh Air Here's the answer to uncomfortably smoky or stuffy rooms that make your eyes stream and breathing difficult. It's an Ioniser that produces fresher air by generating a stream of negative ions that counter the positive ones caused by central heating, cigarettes etc. This one is neat and easily portable, offers excellent value for money and is supplied with a fascinating book that tells you about the Ion Effect.
ND76D Ioniser and Book **£39.95**

The safest stairgate

The only childproof, extendable stairgate available that conforms to all European safety standards. This new English made model is in stove-enamelled steel with a smooth contoured finish, and features a unique walk-through gate with a spring-loaded childproof opening mechanism. Mounted on pressure pads so it won't damage walls, it adjusts from 27½" to 33½", suitable for most stairways. Also available, modular extensions to enlarge by 3" in width.
Stairgate £26.95 MA2065
Extension £6.95 MA2302

STAGE THREE: DESCRIPTION (2a)

The electronic guardian.

This beautifully simple idea acts as a guardian over your possessions in any crowded place – airports, stations, shopping centres – where sneak thieves are rife.

The Active Reminder is two small units, a transmitter and a receiver, that clip together when not in use. Attach the transmitter to your luggage (or place it inside), and when the two units are separated by more than around 20 feet, the receiver emits a high-pitched bleeping noise that indicates that you've wandered away from your luggage – or that your luggage has wandered away from you.

The same principle applies to toddlers toddling off, shopping bags being left behind, and important papers being left at home.

The Active Reminder works through walls, ceilings and floors. Both units have clips for fitting to belts, pockets or luggage straps, and are powered by small watch batteries (supplied).

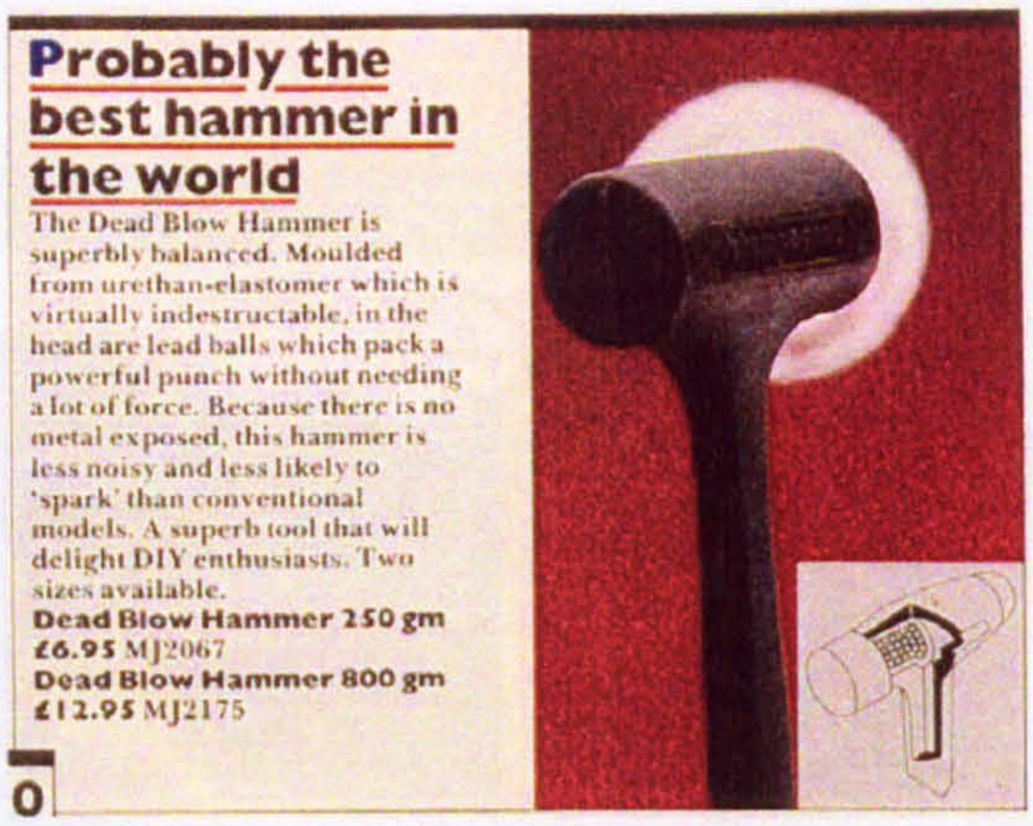
The Active Reminder. Code ATREM1 **£14.95**

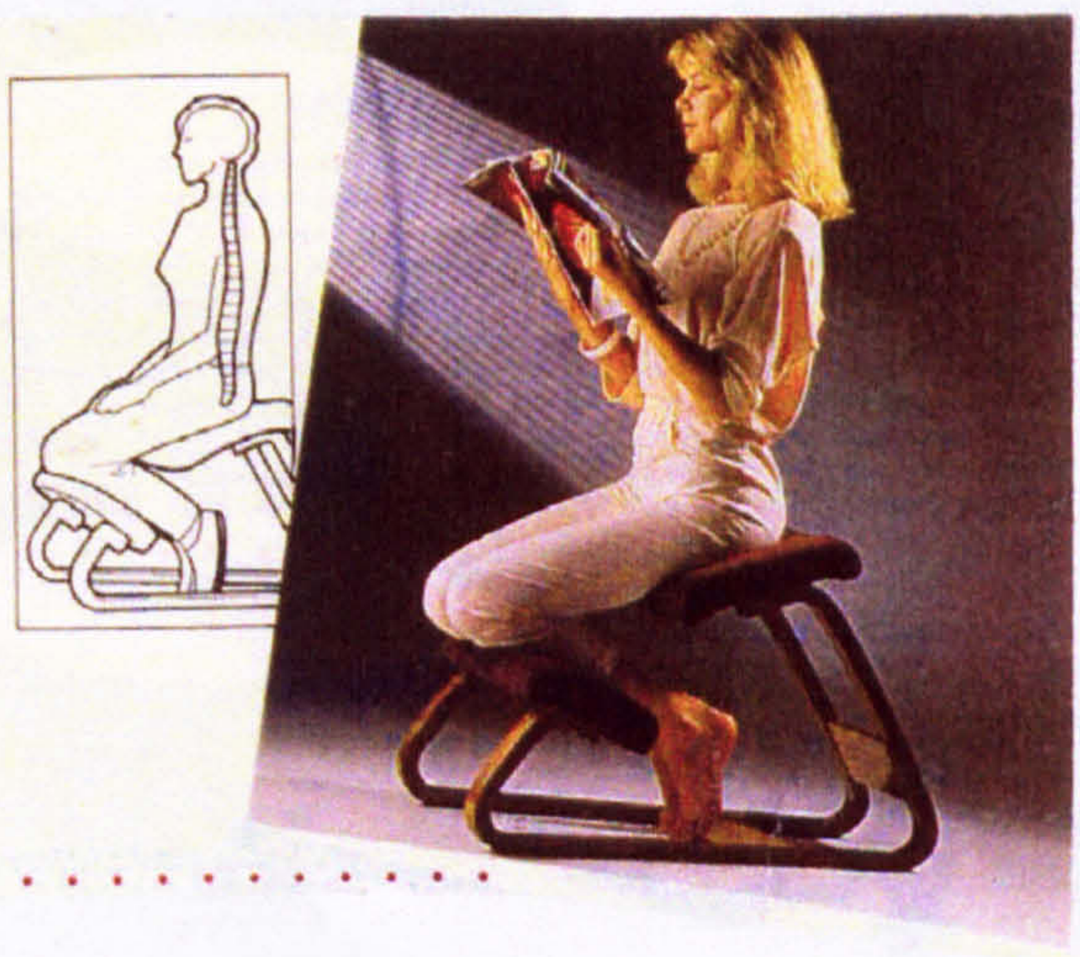
Sonic Pest Repeller

Not a problem you like to get too close to, but rats, mice and cockroaches have been pests for centuries. Short of laying down dangerous chemical poisons and unsightly traps, it's been difficult to find an effective way of keeping them at bay until now. The Pest Repeller emits ultrasonic sound waves that affect the nervous systems of these pests, making it uncomfortable for them to remain within an area of 1600 square feet. Harmless to humans and domestic animals, it will operate continuously and automatically from any mains socket.

Pest Repeller £24.95 FX762

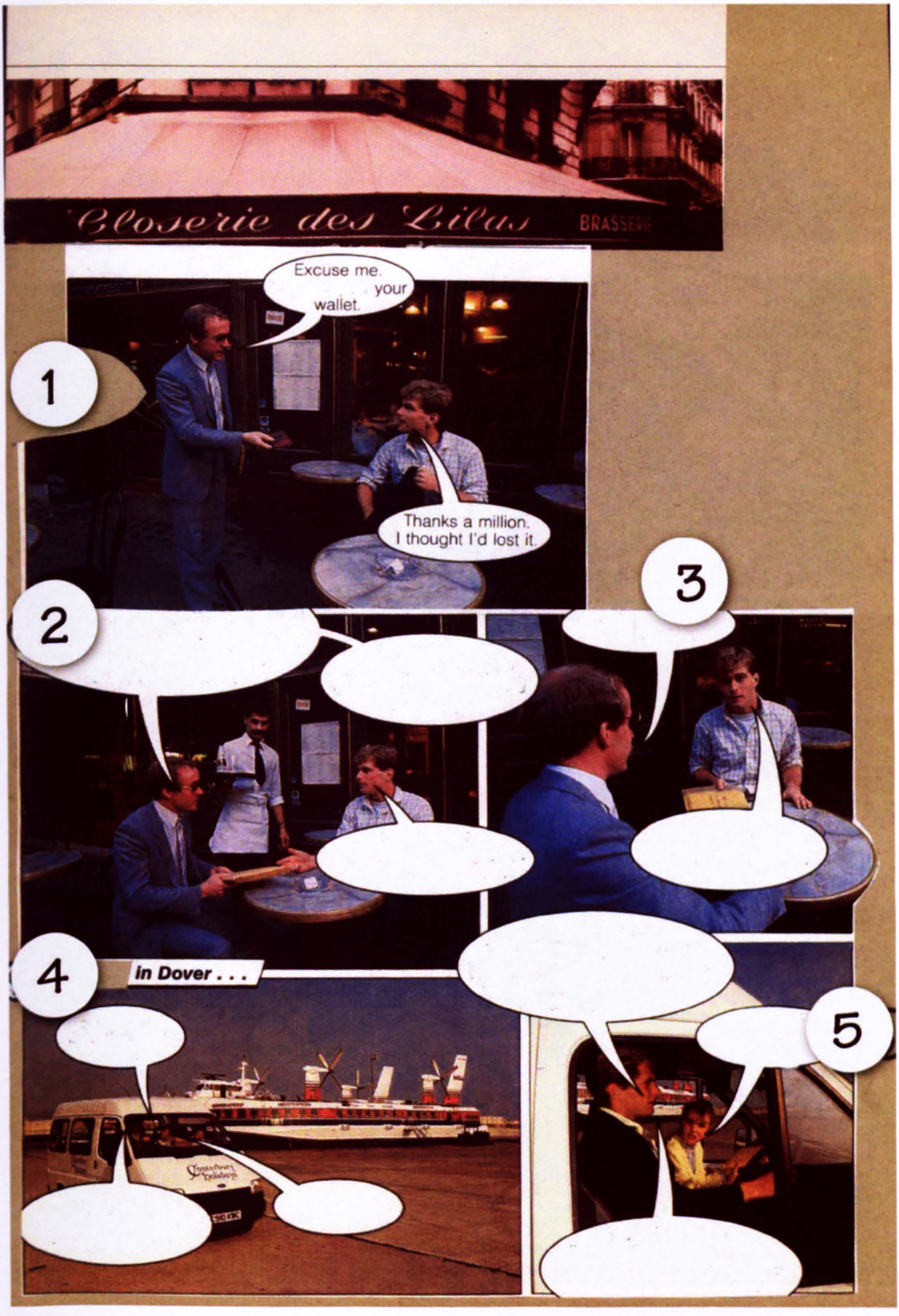
STAGE THREE: DESCRIPTION (2b)



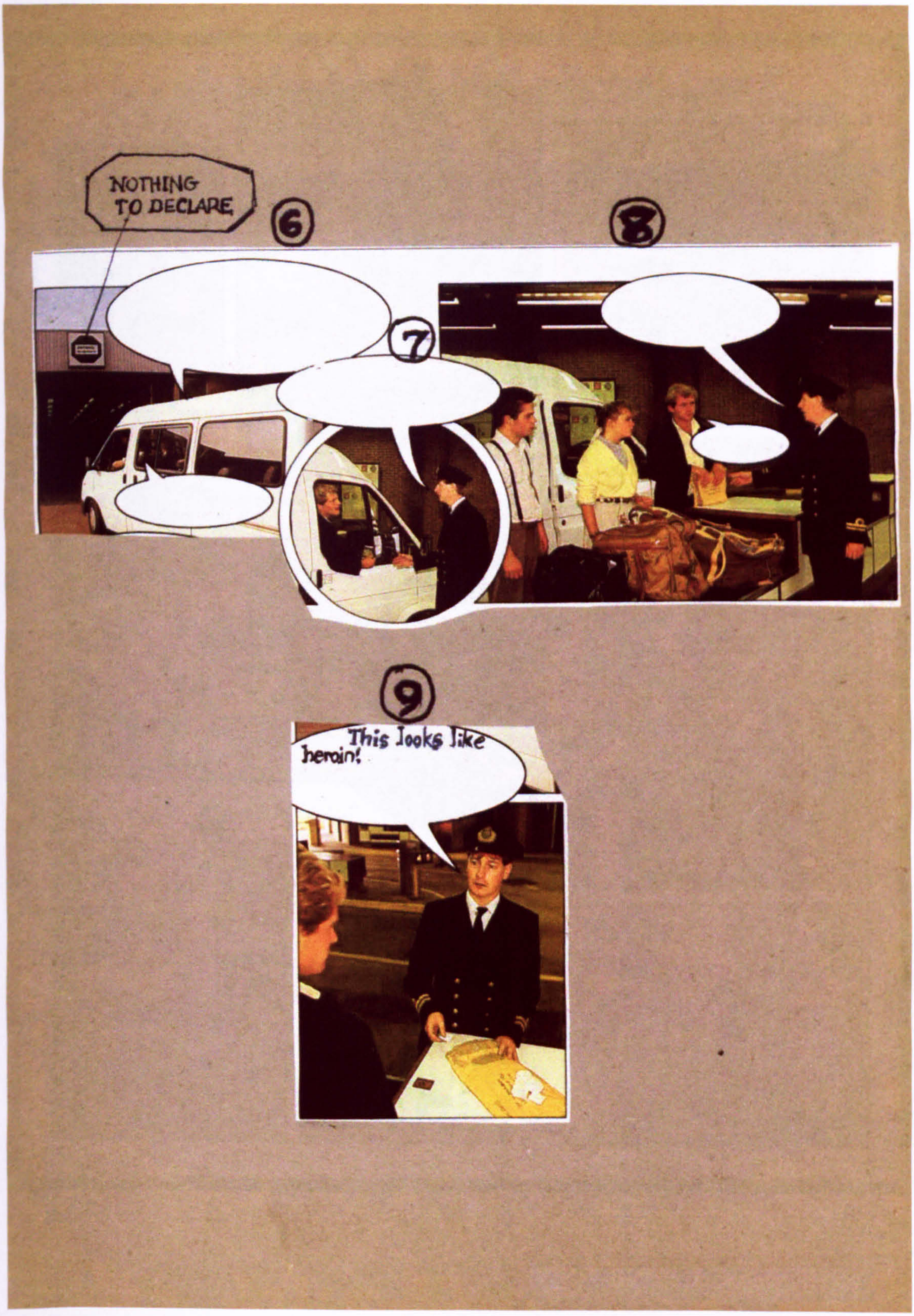


STAGE THREE. DESCRIPTION

STAGE ONE: NARRATION (a)

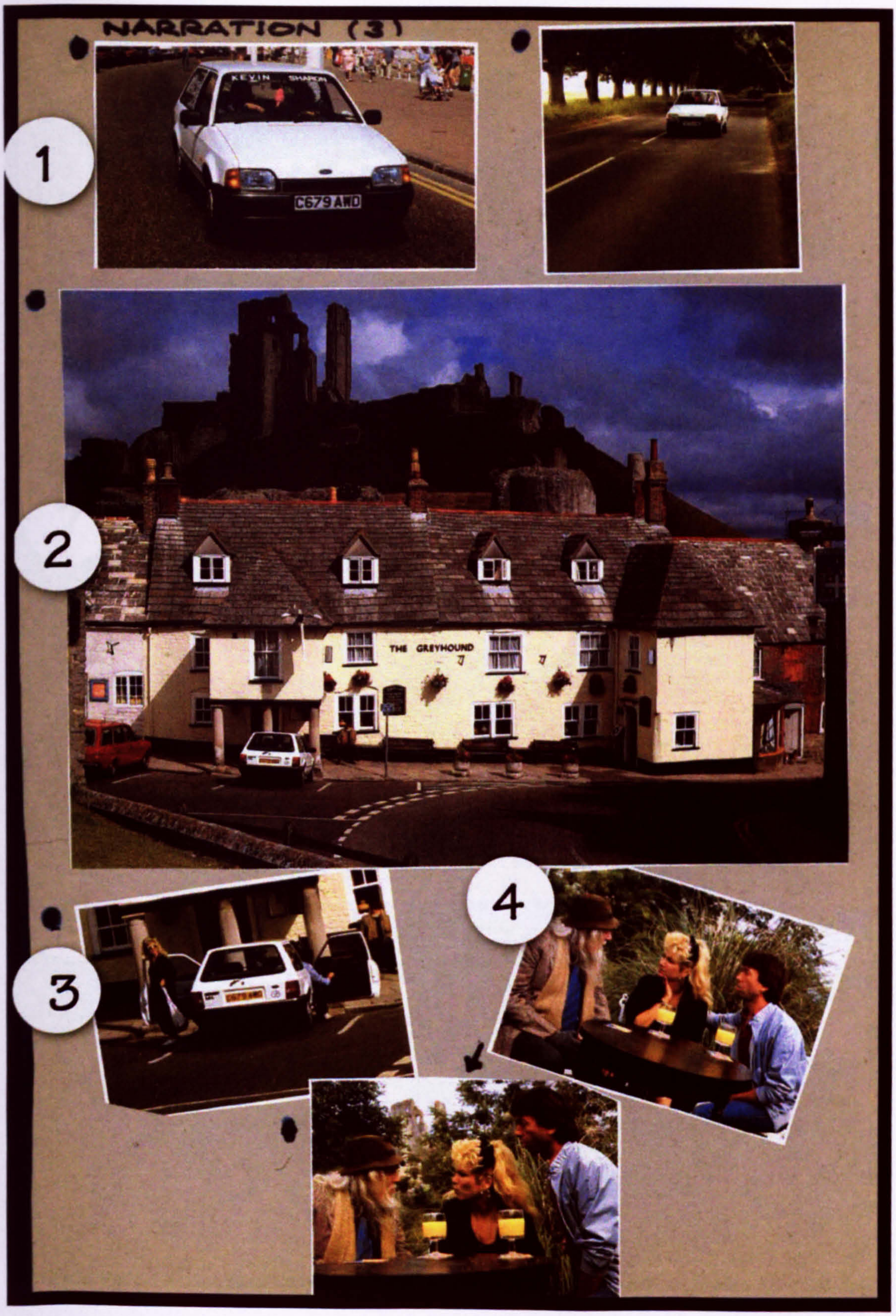


STAGE ONE: NARRATION (b)



STAGE TWO: NARRATION

STAGE THREE: NARRATION (a)



SPOT 10 DELIBERATE MISTAKES

WIN £5,000 IN CASH!

PHOTOGRAPH BY COURTESY CALVIN CLOTHES AND ACCESSORIES FROM LILLYWHITES

BE A SPORT

Enter our fabulous competition – it's fun, it's free and you could be onto a big winner by courtesy of Crispen, the brand new light-hearted cider. There's a mouth-watering £5,000 up for grabs and a tasty treat for 50 lucky runners-up!

SO EYES DOWN and study the strange picture above. Notice anything wrong? Well, you don't have to be a tennis fan to find a few faults with the place! The first couple might look pretty obvious, but can you spot all 10 deliberate mistakes? Some of them are really quite tricky, so we'll help out with one of them now just to give you some encouragement: this is not the way we expect you to read SUNDAY Magazine each week!

PLAY TO WIN! If you're clever enough to find all 10 mistakes, you could win £5,000 in cash as our first-prize winner – and 50 very lucky runners-up will each win a whole crate of delicious, additive-free Crispen. Low in alcohol and made from natural apple juice, it's the refreshing drink that's perfect to serve whatever you're celebrating!

SIMPLY CIRCLE the mistakes clearly with a pen, and then fill in the form. Cut out the whole page and send it to SUNDAY CRISPEN, PO Box 2JY, London W1A 2JY, to arrive by Monday, September 28, 1987, the closing date.

YOUR ENTRY will be scrutinised by our panel of judges, who will award £5,000 to the sender of the first entry drawn from our mailbags who has, in their opinion, clearly spotted and marked all 10 deliberate mistakes. Runner-up prizes will be awarded accordingly and standard SUNDAY Magazine competition rules apply. All of the winners will be notified by post and the Editor's decision is final.

NAME .....

.....

ADDRESS .....

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POSTCODE .....

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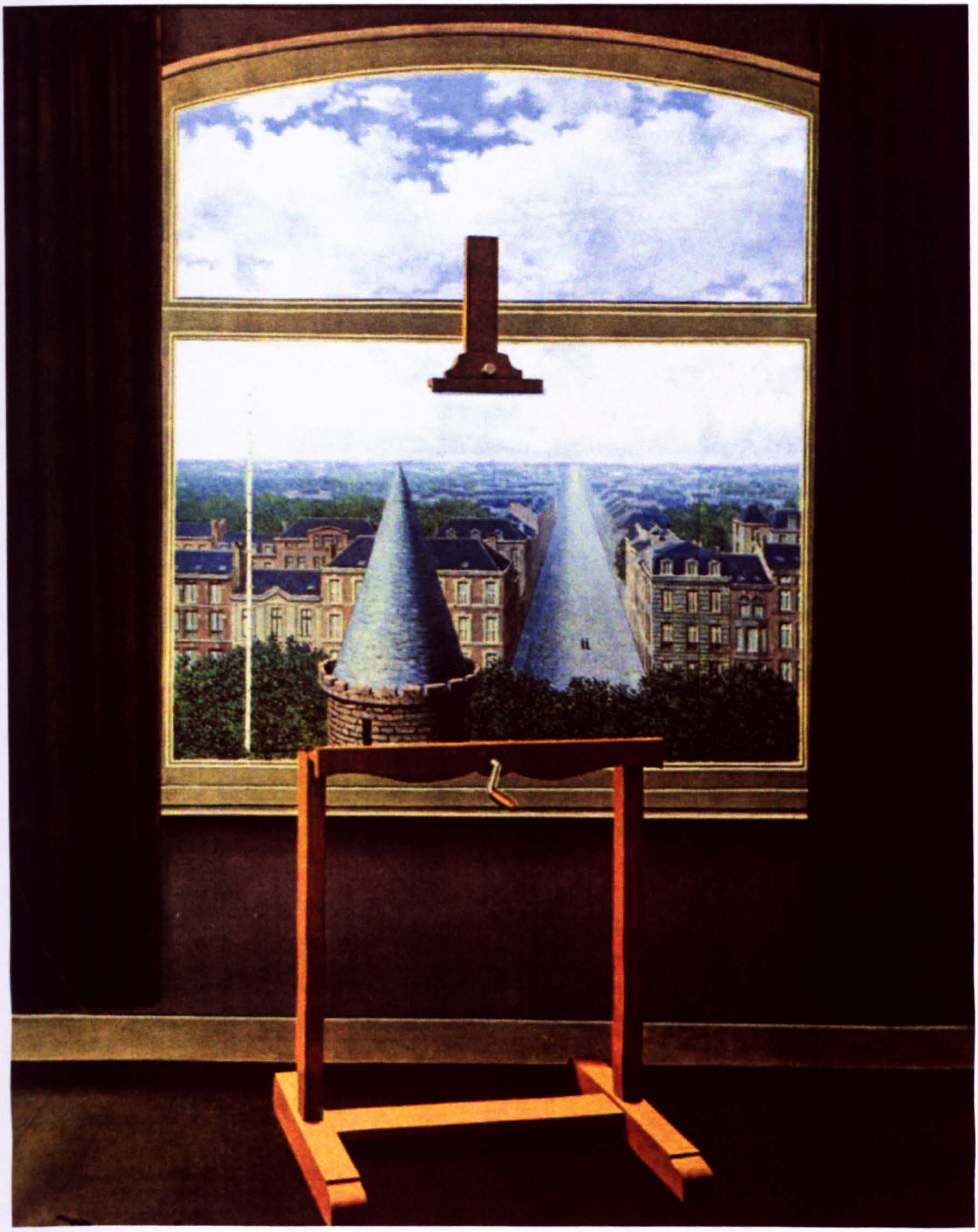
NEWS OF THE WORLD SEPT. 13, 1987

Sunday Magazine

STAGE ONE PROBLEM-SOLVING

STAGE TWO: PROBLEM-SOLVING (2)

STAGE THREE: PROBLEM-SOLVING (3a)



STAGE THREE: PROBLEM-SOLVING (3b)

STATISTICAL DATA

SCORES FOR TIME * MODE

COMPLEXITY SCORES : DESCRIPTIONS 1, 2 , & 3

		COMPLEXITY						Scores		
	Subject Id	C-Units			Nº Clauses					
		T1	T2	T3	T1	T2	T3	T1	T2	T3
1	Giovanna	14	20	23	29	52	70	2,07	2,60	3,04
2	Elif	12	12	14	22	28	27	1,83	*2,33*	1,93
3	Charo	13	15	8	45	55	35	3,46	3,67	4,38
4	Mujgan	7	13	16	27	33	64	3,86	2,54	4,00
5	Serico	21	22	18	45	59	46	2,14	*2,68*	2,56
6	Marcela	15	20	17	44	35	39	2,93	1,75	2,29
7	Johann	14	13	12	46	38	47	3,29	2,92	3,92
8	Daniel	10	11	13	22	28	36	2,20	2,55	2,77
9	Cecille	22	11	16	69	38	81	3,14	3,45	5,06
10	Maria	13	12	9	40	47	53	3,08	3,92	5,89
11	Mauro	9	9	15	38	38	38	4,00	*4,22*	2,53
12	José	13	12	4	51	45	27	3,92	3,75	6,75
13	Inalda	10	5	9	33	30	31	3,30	*6,00*	3,44
14	Ozgul	6	5	9	23	26	42	3,83	*5,20*	4,67
15	Rosa	10	14	23	24	47	51	2,40	*3,36*	2,22
16	Elana	17	21	18	80	66	58	4,71	3,14	3,22
	MeanScores	12,88	13,44	14,00	39.75	41,56	46,56	3,14	3,38	3,67

COMPLEXITY SCORES : NARRATIONS 1, 2 , & 3

		COMPLEXITY								
	Subject Id	C-Units			Total Nº Clauses			Scores		
		T1	T2	T3	T1	T2	T3	T1	T2	T3
1	Giovanna	26	13	15	72	39	56	2,77	3,00	3,73
2	Elif	15	15	10	40	40	55	2,67	2,67	5,50
3	Charo	16	9	18	65	45	83	4,06	5,00	4,61
4	Mujgan	20	9	9	64	43	33	3,20	4,78	3,67
5	Serico	9	16	14	18	52	34	2,00	3,25	2,43
6	Marcela	14	9	15	50	28	48	3,57	3,11	3,20
7	Johann	20	16	7	62	53	35	3,10	3,31	5,00
8	Daniel	10	13	9	30	36	49	3,00	2,77	5,44
9	Cecille	22	13	10	80	68	50	3,64	5,23	5,00
10	Maria	10	14	10	23	44	57	2,30	3,14	5,70
11	Mauro	12	8	11	59	34	49	4,92	4,25	4,45
12	José	9	11	6	32	41	37	3,56	3,73	6,17
13	Inalda	6	5	9	23	25	51	3,83	5,00	5,67
14	Ozgul	9	5	2	35	33	18	3,89	6,60	9,00
15	Rosa	11	13	12	44	55	71	4,00	4,23	5,92
16	Elana	14	12	6	41	33	37	2,93	2,75	6,17
	MeanScores	13.94	11.31	10.19	46.13	41.81	47.69	3,34	3.93	5.10

COMPLEXITY SCORES : PROBLEM SOLVING 1, 2 , & 3

		COMPLEXITY Problem-solving								
	Subject Id	C-Units			Total Nº Clauses			Scores		
		T1	T2	T3	T1	T2	T3	T1	T2	T3
1	Giovanna	18	21	11	27	50	33	1,50	2,38	3,00
2	Elif	11	12	13	36	47	44	1,58	2,09	2,27
3	Charo	13	9	11	33	29	62	3,27	3,92	3,38
4	Mujgan	17	16	13	39	49	86	2,50	3,14	2,22
5	Serico	8	5	8	19	20	34	3,07	2,33	3,71
6	Marcela	19	17	17	53	62	80	1,53	2,05	2,77
7	Johann	17	13	16	43	34	55	1,80	2,22	4,10
8	Daniel	14	18	14	43	42	52	3,15	1,88	4,25
9	Cecille	15	22	13	23	45	36	2,54	3,22	5,64
10	Maria	12	8	12	40	49	35	2,29	3,06	6,62
11	Mauro	9	9	12	33	26	63	2,38	4,00	4,25
12	José	12	11	11	19	23	25	3,33	6,13	2,92
13	Inalda	8	7	9	20	22	20	3,67	2,89	5,25
14	Ozgul	10	9	10	18	19	41	4,40	3,33	3,20
15	Rosa	13	17	12	41	32	51	2,53	2,62	3,44
16	Elana	10	9	10	44	30	32	2,79	3,65	4,71
	MeanScores	12.88	12.69	12.00	33.19	36.25	46.81	2.65	3.06	3.86

ACCURACY SCORES : DESCRIPTION TIMES ONE ,TWO & THREE

	Subjects	Total Nº Clauses			ACCURACY Error-Free Cls			Accuracy Ratios		
		T1	T2	T3	T1	T2	T3	T1	T2	T3
1	Giovanna	29	52	70	21	43	61	72,4	82,7	87,1
2	Elif	22	28	27	15	21	25	68,2	75,0	92,6
3	Charo	45	55	35	38	40	26	84,4	72,7	74,3
4	Mujgan	27	33	64	15	26	44	55,6	78,8	68,8
5	Serico	45	59	46	31	38	40	68,9	64,4	87,0
6	Marcela	44	35	39	24	14	24	54,5	40,0	61,5
7	Johann	46	38	47	37	26	41	80,4	68,4	87,2
8	Daniel	22	28	36	15	15	19	68,2	53,6	52,8
9	Cecille	69	38	81	56	30	64	81,2	78,9	79,0
10	Maria	40	47	53	36	44	45	90,0	93,6	84,9
11	Mauro	36	38	38	31	33	35	86,1	86,8	92,1
12	José	51	45	27	39	38	18	76,5	84,4	66,7
13	Inalda	33	30	31	27	22	27	81,8	73,3	87,1
14	Ozgul	23	26	42	17	16	31	73,9	61,5	73,8
15	Rosa	24	47	51	22	47	42	91,7	100	82,4
16	Elana	80	66	58	74	61	55	92,5	92,4	94,8
	MeanScores	39.75	41,56	46,56	31.13	32,13	37,31	76,64	75,42	79,50

ACCURACY SCORES : NARRATIONS 1, 2, & 3

	Subjects	Total N° Clauses			Error-Free Cls			Accuracy Ratios		
		T1	T2	T3	T1	T2	T3	T1	T2	T3
1	Giovanna	72	39	56	53	28	33	73,6	71,8	58,9
2	Elif	40	40	55	29	22	38	72,5	55,0	69,1
3	Charo	65	45	83	44	37	65	67,7	82,2	78,3
4	Mujgan	64	43	33	38	20	18	59,4	46,5	54,5
5	Serico	18	52	34	12	27	21	66,7	51,9	61,8
6	Marcela	50	28	48	30	15	33	60,0	53,6	68,8
7	Johann	62	53	35	48	35	33	77,4	66,0	94,3
8	Daniel	30	36	49	20	13	35	66,7	36,1	71,4
9	Cecille	80	68	50	57	52	44	71,3	76,5	88,0
10	Maria	23	44	57	22	40	53	95,7	90,9	93,0
11	Mauro	59	34	49	47	23	44	79,7	67,6	89,8
12	José	32	41	37	22	31	30	68,8	75,6	81,1
13	Inalda	23	25	51	15	23	46	65,2	92,0	90,2
14	Ozgul	35	33	18	11	19	12	31,4	57,6	66,7
15	Rosa	44	55	71	27	49	59	61,4	89,1	83,1
16	Elana	41	33	37	36	29	34	87,8	87,9	91,9
	MeanScores	46.13	41.81	47.69	31.94	28.94	37.38	69.07	68.77	77.55

Table 6.2 : Accuracy Scores for NarrationTasks over time

ACCURACY SCORES : PROBLEM-SOLVING 1, 2 , & 3

		ACCURACY									
	Subject Id	Total N° Clauses			Error-Free Cls			Ratios			Gain Scores
		T1	T2	T3	T1	T2	T3	T1	T2	T3	%
1	Giovanna	27	50	33	21	39	27	77,8	78,0	81,8	5.14
2	Elif	36	47	44	31	34	34	89,5	65,2	80,0	-10.61
3	Charo	33	29	62	30	21	51	86,1	72,3	77,3	-10.22
4	Mujgan	39	49	86	34	41	76	75,0	54,5	80,0	6.66
5	Serico	19	20	34	18	17	28	81,4	85,7	80,8	-11.55
6	Marcela	53	62	80	51	57	72	87,0	71,1	83,3	-4.25
7	Johann	43	34	55	43	32	50	66,7	65,0	85,4	28.04
8	Daniel	43	42	52	35	36	42	53,7	68,8	84,3	56.99
9	Cecille	23	45	36	20	32	30	90,9	72,4	82,3	-9.46
10	Maria	40	49	35	34	28	27	87,2	83,7	88,4	1.60
11	Mauro	33	26	63	27	18	57	94,7	85,0	82,4	-12.98
12	José	19	23	25	17	15	20	85,0	57,1	77,1	-9.29
13	Inalda	20	22	20	15	12	16	81,8	69,2	90,5	10.63
14	Ozgul	18	19	41	12	13	35	56,8	60,0	75,0	32.04
15	Rosa	41	32	51	22	22	43	100	94,1	90,9	-9.1
16	Elana	44	30	32	25	18	24	96,2	91,9	92,5	-3.84
Mean Scores		33.19	36.25	46.81	27.19	27.19	39.63	81.86	73.39	83.24	1.88

Table 8.2 : Accuracy Scores for Problem-SolvingTasks over time

TRANSACTIONAL INTERACTIONAL SCORES : Descriptions 1, 2 & 3

		Total Clauses			TRANSACT Cls			N°Cls/Tran Ratios			INTERACT Cls.			N°Cls/Inter Ratios		
		T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
1	Giovanna	29	52	70	16	27	51	55,2	51,9	72,9	13	25	19	44,8	48,1	27,1
2	Elif	22	28	27	16	20	18	72,7	71,4	66,7	6	8	9	27,3	28,6	33,3
3	Charo	45	55	35	28	35	30	62,2	63,6	85,7	17	20	5	37,8	36,4	14,3
4	Mujgan	27	33	64	16	17	42	59,3	51,5	65,6	11	16	22	40,7	48,5	34,4
5	Serico	45	59	46	25	30	24	55,6	50,8	52,2	20	29	22	44,4	49,2	47,8
6	Marcela	44	35	39	29	26	21	65,9	74,3	53,8	15	9	18	34,1	25,7	46,2
7	Johann	46	38	47	16	21	26	34,8	55,3	55,3	30	17	21	65,2	44,7	44,7
8	Daniel	22	28	36	4	14	22	18,2	50,0	61,1	18	14	14	81,8	50,0	38,9
9	Cecille	69	38	81	37	26	44	53,6	68,4	54,3	32	12	37	46,4	31,6	45,7
10	Maria	40	47	53	31	27	29	77,5	57,4	54,7	9	20	24	22,5	42,6	45,3
11	Mauro	36	38	38	20	17	23	55,6	44,7	60,5	16	21	15	44,4	55,3	39,5
12	José	51	45	27	23	20	23	45,1	44,4	85,2	28	25	4	54,9	55,6	14,8
13	Inalda	33	30	31	24	17	26	72,7	56,7	83,9	9	13	5	27,3	43,3	16,1
14	Ozgul	23	26	42	16	18	29	69,6	69,2	69,0	7	8	13	30,4	30,8	31,0
15	Rosa	24	47	51	15	33	36	62,5	70,2	70,6	9	14	15	37,5	29,8	29,4
16	Elana	80	66	58	44	47	36	55,0	71,2	62,1	36	19	22	45,0	28,8	37,9
MEANS		**12.88**	**41.56**	**46.56**	**22.50**	**24.69**	**30.00**	**57.21**	**59.45**	**65.85**	**17.25**	**16.88**	**16.56**	**42.79**	**40.55**	**34.15**

TRANSACTIONAL INTERACTIONAL SCORES : Narrations 1, 2 & 3

		Total Clauses			TRANSACT Cls			N°Cls/Tran Ratios			INTERACT Cls.			N°Cls/Inter Ratios		
		T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
1	Giovanna	72	39	56	58	18	33	80,6	46,2	73,2	14	21	15	19,4	53,8	26,8
2	Elif	40	40	55	28	23	38	70,0	57,5	67,3	12	17	18	30,0	42,5	32,7
3	Charo	65	45	83	46	36	65	70,8	80,0	83,1	19	9	24	29,2	20,0	28,9
4	Mujgan	64	43	33	27	35	18	42,2	81,4	84,8	37	8	5	57,8	18,6	15,2
5	Serico	18	52	34	15	37	21	83,3	71,2	88,2	3	15	4	16,7	28,8	11,8
6	Marcela	50	28	48	35	18	33	70,0	64,3	89,6	15	10	5	30,0	35,7	10,4
7	Johann	62	53	35	49	45	33	79,0	84,9	71,4	13	8	10	21,0	15,1	28,6
8	Daniel	30	36	49	5	32	35	16,7	88,9	61,2	25	4	19	~~83,3~~	11,1	38,8
9	Cecille	80	68	50	60	58	44	75,0	85,3	70,0	20	10	15	25,0	14,7	30,0
10	Maria	23	44	57	22	41	53	95,7	93,2	71,9	1	3	16	4,3	6,8	28,1
11	Mauro	59	34	49	48	28	44	81,4	82,4	81,6	11	6	9	18,6	17,6	18,4
12	José	32	41	37	14	37	30	43,8	90,2	94,6	18	4	2	56,3	9,8	5,4
13	Inalda	23	25	51	20	22	46	87,0	88,0	92,2	3	3	4	13,0	12,0	7,8
14	Ozgul	35	33	18	33	29	12	94,3	87,9	94,4	2	4	1	5,7	12,1	5,6
15	Rosa	44	55	71	39	52	59	88,6	94,5	88,7	5	3	8	11,4	5,5	11,3
16	Elana	41	33	37	25	24	34	61,0	72,7	70,3	16	9	11	39,0	27,3	29,7
MEANS		**46.13**	**41.81**	**47.69**	**32,75**	**33.44**	**37.94**	**71.20**	**79,28**	**80,17**	**13.38**	**8.39**	**10.38**	**28.80**	**20,72**	**20,58**

Table 7.10: Transactional and Interactional Scores for Narration Tasks over time

TRANSACTIONAL INTERACTIONAL SCORES : Problem Solving 1, 2 & 3

		Total Clauses			TRANSACT Cls			NºCls/Tran Ratios			INTERACT Cls.			NºCls/Inter Ratios		
		T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
1	Giovanna	27	50	33	16	20	17	59,3	40,0	51,5	11	30	16	40,7	60,0	48,5
2	Elif	19	23	25	15	6	13	78,9	26,1	52,0	4	17	12	21,1	73,9	48,0
3	Charo	36	47	44	23	24	27	63,9	51,1	61,4	13	23	17	36,1	48,9	38,6
4	Mujgan	20	22	20	14	9	5	70,0	40,9	25,0	6	13	15	30,0	59,1	75,0
5	Serico	43	42	52	34	26	33	79,1	61,9	63,5	9	16	19	20,9	38,1	36,5
6	Marcela	23	45	36	19	26	18	82,6	57,8	50,0	4	19	18	17,4	42,2	50,0
7	Johann	18	19	41	15	8	38	83,3	40,0	92,7	3	11	3	16,7	55,0	7,3
8	Daniel	41	32	51	32	16	32	78,0	50,0	62,7	9	16	19	22,0	50,0	37,3
9	Cecille	33	29	62	28	23	49	84,8	79,3	79,0	5	6	13	15,2	20,7	21,0
10	Maria	39	49	86	33	42	60	84,6	85,7	69,8	6	7	26	15,4	14,3	30,2
11	Mauro	19	20	34	9	16	20	47,4	80,0	58,8	10	4	14	52,6	20,0	41,2
12	José	40	49	35	32	38	31	80,0	77,6	88,6	8	11	4	20,0	22,4	11,4
13	Inalda	33	26	63	30	21	52	90,9	80,8	82,5	3	5	11	9,1	19,2	17,5
14	Ozgul	44	30	32	32	25	22	72,7	83,3	68,8	12	5	10	27,3	16,7	31,3
15	Rosa	43	34	55	30	25	41	69,8	73,5	74,5	13	9	14	30,2	26,5	25,5
16	Elana	53	62	80	28	40	59	52,8	64,5	73,8	25	22	21	47,2	35,5	26,3
MEANS		33.19	36.25	46.81	24.38	22.81	32.31	73.64	62.03	65.91	8.81	13.38	14.50	26.36	37.66	34.09

Table 8.2: Transactional and Interactional Scores for Problem Solving Tasks over time

FLUENCY SCORES : Description 1, 2,and 3

THE STATISTICS OF OVERALL FLUENCY OVER TIME

DESCRIPTION	FLUENCY 1 -2 & 3																	
	NºPauses			Pausing ss			Replace			False Starts			Reforms			Repets		
Subject Ident	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
Giovanna	7	12	5	7	16	7	0	3	3	0	2	1	1	5	14	1	2	6
Elif	17	4	3	24	4	8	0	0	0	1	1	0	8	4	5	4	4	3
Charo	12	5	2	19	7	3	0	1	0	0	1	1	10	13	8	3	3	1
Mujgan	8	4	10	18	11	16	0	0	1	1	1	1	7	8	16	2	2	4
Serico	5	8	16	8	12	19	1	1	0	0	0	1	7	11	11	1	5	2
Marcela	7	7	5	17	14	11	1	0	1	2	0	2	21	12	12	2	1	2
Johann	10	12	16	15	20	28	1	3	3	2	1	1	4	4	10	2	0	1
Daniel	10	14	10	18	18	24	1	3	2	1	1	2	9	9	12	0	0	2
Cecille	7	9	9	9	12	9	4	4	1	1	0	3	11	9	14	9	3	5
Maria	5	4	7	5	4	7	1	3	1	0	3	2	7	20	17	4	3	4
Mauro	7	8	5	10	11	8	2	2	1	0	0	1	12	9	12	3	1	2
José	13	12	13	16	14	16	4	3	2	0	3	0	19	13	6	3	2	4
Inalda	7	10	5	8	13	12	2	1	1	0	0	0	8	6	7	6	4	1
Ozgul	4	8	9	9	11	18	0	0	2	0	1	3	4	1	11	4	0	1
Rosa	4	5	4	5	5	5	0	0	4	1	4	4	7	11	12	7	3	1
Elana	11	9	6	13	9	6	3	2	1	1	0	3	10	14	16	8	6	3

Table 6.7 Individual Fluency Scores for Description 1, 2 & 3

OVERALL FLUENCY SCORES FOR DESCRIPTION

	N° Pauses	Pausing Length	Replace	False Starts	Reforms	Repets
T1	8.38	12.56	1.25	.63	9.06	3.69
T2	8.19	11.31	1.63	1.13	9.31	2.56
T3	7.81	7.81	1.44	1.56	11.44	2.63

Table 6.5 Total Fluency Scores for Description 1, 2 & 3

FLUENCY SCORES : Narration 1, 2,and 3

THE STATISTICS OF FLUENCY OVER TIME

NARRATION	FLUENCY 1 -2 & 3																	
	N°Pauses			Pausing ss			Replace			False Starts			Reforms			Repets		
Subject Ident	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
Giovanna .	16	8	14	23	12	20	1	2	0	1	0	0	9	9	6	0	3	3
Elif *	8	7	16	11	10	27	1	1	1	0	0	0	4	8	6	4	2	7
Charo *	7	7	9	8	7	10	3	1	2	0	0	4	15	15	20	1	1	1
Mujgan -	11	11	1	18	18	2	1	2	0	1	1	1	20	20	14	6	6	6
Serico *	3	27	11	6	37	17	1	0	2	1	0	2	6	19	12	1	2	4
Marcela	8	8	10	15	9	14	1	0	3	3	1	2	18	12	16	4	0	4
Johann -	21	11	12	32	14	15	1	1	4	2	1	0	17	10	3	6	3	0
Daniel *	5	14	15	9	19	23	1	3	6	2	1	0	13	7	12	2	0	5
Cecille -	14	9	5	17	9	5	2	1	2	1	1	2	11	15	7	6	1	2
Maria *	2	1	7	2	1	9	1	0	4	0	1	1	7	10	27	1	4	6
Mauro	7	12	10	11	12	11	0	5	4	2	2	0	20	15	18	5	4	3
José -	7	11	2	7	15	2	4	0	0	0	0	1	14	31	7	2	5	1
Inalda	8	3	12	14	4	13	1	0	1	1	3	1	7	14	13	5	1	9
Ozgul -	20	10	7	29	17	8	6	1	0	2	0	0	14	10	7	3	2	3
Rosa *	9	5	13	10	5	13	2	1	4	2	2	3	18	20	33	11	6	4
Elana	7	2	7	8	2	9	1	2	0	0	1	0	13	10	9	5	0	2

Table 7.9 Individual Fluency Scores for Narration 1, 2 & 3

OVERALL FLUENCY SCORES FOR NARRATIVES

Times One, Two and Three

	N° Pauses	Pausing Length	Replace	False Starts	Reforms	Repets
T1	9.56	13.75	1.69	1.13	12.88	3.88
T2	9.13	11.94	1.25	.88	14.06	2.50
T3	9.84	12.38	2.06	1.06	13.13	3.75

FLUENCY SCORES : PROBLEM SOLVING 1, 2,and 3

Problem Solving	FLUENCY FACTORS OVER TIME																	
	NºPauses			Pausing ss			Replace			False Starts			Reforms			Repets		
Subject ID	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
Giovanna *	8	15	17	13	22	30	1	1	0	0	0	0	3	11	4	1	0	0
Elif *	5	10	10	9	13	13	0	0	0	0	0	0	8	5	4	3	1	2
Charo	8	15	11	9	20	18	0	1	0	0	0	2	9	7	3	1	0	3
Mujgan	10	8	9	14	11	12	0	0	0	0	1	1	9	7	6	3	2	4
Serico *	3	2	8	5	3	17	0	0	0	0	1	2	20	10	21	4	2	9
Marcela *	6	5	6	11	6	12	0	1	1	0	1	0	10	11	16	12	2	5
Johann *	3	2	4	6	2	4	1	0	3	0	2	0	3	0	11	1	4	6
Daniel	11	2	12	23	21	14	2	0	4	2	1	2	12	9	8	0	1	4
Cecille *	7	5	6	7	7	6	0	0	0	0	0	0	5	3	10	3	3	2
Maria *	4	5	8	4	7	10	0	1	1	0	1	2	13	19	19	1	2	2
Mauro *	3	0	7	3	0	12	2	0	0	0	0	1	3	12	13	2	2	1
José	9	5	9	10	5	10	1	1	1	0	3	0	12	27	14	1	4	1
Inalda *	7	9	11	11	12	15	1	1	3	0	0	1	13	9	15	3	2	1
Ozgul	4	9	4	8	10	5	3	1	0	0	0	0	9	4	5	2	2	2
Rosa *	1	5	6	1	6	8	1	2	1	1	1	0	13	12	13	4	2	9
Elana *	6	8	3	7	12	3	0	1	1	2	0	2	10	9	23	2	7	2

Table 8.4: Individual Fluency Scores

OVERALL FLUENCY SCORES FOR PROBLEM SOLVING

Times One, Two and Three

	Nº Pauses	Pausing Length	Replace	False Starts	Reforms	Repets
T1	5.94	8.81	0.75	0,31	9.50	2.69
T2	6.56	9.81	0.63	0.69	9.69	2.25
T3	8.19	11.81	0.94	0.81	11.56	3.31

FLUENCY-COMPLEXITY AND ACCURACY ***
DESCRIPTION ONE
==========
OBJECTS:HUSH BABY/CAR COVER/ADDRESS BOOK/DIY-PIPE SENSOR

HUSH BABY

MARCELA:I'm choose...it's something...for...eeh...it's like a machine
and **(2.0)**...take...eeh...has...music..from music...and
it..eeh..when...baby...when it..it...eeh..wakes up...in the night and this machine working..
(1u/5cl) <3>

S: ...it's...like...a radio... **(1u/1cl) <1>**
M: ...yeah...it's like...a radio...yeah and **(3.0)**...eh eeh
is it...in the crib...with baby and
(1u/2cl) <1>

if...eeh he or she...wake up...the machine eeh...play some music /S:uhmm/...for tooo
(2.0)...to make him...to sleep..(S: again)to sleep again.
(1u/3cl) <0>
CAR COVER

this is eeh...one...and the other one...is
eeh..is...a cover for the car...plastic cover...
(1u/2cl) <2>

and is very conforta-ble...because...eeh...when you take...eeh ... the cover... you can keep
innn..in a bag../Serico...yeah../ in..
in a small bag.../Serico...aha/
(1u/3cl) <1>

S: all..all the car? **(1u/1cl) <1>**

M: yeah...you can cover all the car /S:aha/ and...well you can cover...big a car...annnd
when you take home...you can keep..
(2.0) .in..in a small bag and /S: ah yeah/...you can carry...in a small...bag. **(1u/3cl) <1>**

SERICO:
ADDRESS BOOK
S. and...I choose...one note book..I think
it's note book...note book.. I have no idea...oh yeah...
address book.. **(1u/3cl) <3>**

M: ...aah...address book.
S: ...and...all the people think..oh that's good...most useful for me...

(1u/3cl) <3>

it is good for...organize people...to take...address...and telephone...everything...(switched to his second choice here)

(1u/2cl) <0>

DIY PIPE SENSOR

..and another thing... was eeh... I don't know the name .. click... when you put two pages together...what's the name...of it... "click" ?

(1u/3cl) <3>

M: I..eehh I don't know the name.. but...eeh. I know...what you mean..(laughs). **(1u/3cl) <3>**

S: (laughing as well)..yeah...eeh but it's for all...wall.. for the pavement.. for wall... for... the floor... you can put everywhere...on the paper...here the top...put the clips ...down here...it's it looks ...like..a pipe very easy to handle..and only these two things I like..

(1u/5cl) <3>

*(seems very confused about his description).

I: the first thing you said was an address book!
why do you think that's good?

S: mmm...it's good for organize people...to put eeh names..
..all the names...and telephones(1.0)... **(1u/2cl) <2>**

some people..I know...have...a watch...with address...telephone number...everything...
(1u/2cl) <2>

but I think... theee **(2.0)**..address book's ...better to hand to handle.. **(1u/2cl) <2>**

speaking time: three minutes

I: is this book, address book ,any special or different from other address books?

S: yes 'cause have a **(3.0)**...hmm..not a lot cata..logue...
all the letters very...easy to handle... **(1u/2cl)<0>**

and...**you can (1.0)**...brush and **take out thee..the letters** and put another one...if then...one person die **you can put another name**... **(1u/5cl) <2>**
<<switching to "car-cover">>

S: this this cover... this plastic cover ...it's only for the-ee... **(1.0)** raining or...can you use it in winter?

(1u/2cl) <1>

M: maybe..if you...want...want..to..to keep..keep the car.. yeah for the... if..if for example...you haven't eeh **(1.0)**...park /S:yeah/...to keep the car /S:yeah/...and you have leave the car...in the street.

S: outside...yeah... **(1u/1cl) <1>**
M: yeah outside...it's good...
(1u/4cl) <2>
S: ...yeah...but.. it's for winter...? **(1u/1cl) <1>**

M: ...for the winter...
S: for snow...for raining (M:raining)...sunshine...everything.
(1u/1cl) <1>

M: yes...for to keep...the car...
S: but we have...all ..colours? **(1u/1cl)<0>**

M: yes...you can choose...any colour...you want..uhmm.
(1u/1cl) <1>
S: ok...but it's only for car...not...have for bycicle... motor bike...nothing.. **(1u/2cl) <0>**

M: ...no...it's just for the car...uhmm
(1u/1cl) <1>
S: what was the other ..a thing for the baby..?
(1u/1cl) <1>
M: quiet nights..! /S:yeah!/

I: why did you find that one convenient?

M: inconvenient? Aaah...convenient eeh...this ..the cover car because...is if..if you haven't any place...to keep the car you can leave...in the street...and you can put the cover..
(1u/5cl) <1>
S: yeah...to protect theee...
M: eeh..to protect the car...yeah
(1u/1cl) <1>
I: and the one about the baby?
M: eeeh..the baby?...eeh...because...if thee.. for example...i-in the nights...if you..you are sleeping and you can't...eeh... you can't hear...the baby...the baby..when is.. he is sleeping...I think..eeh the machine's..working for you...
(1u/4cl) <3>

I: how?
M: eeh..**(5.0)** because thee..the machine is is...automatically **(2.0)** ...when the eeh machine hear...the baby's eeh..crying...and then...the machine starts...to work...
(1u/4cl) <2>

S: it's a "sound machine". **(1u/1cl)<1>**
M: sound..."sound machine"...yeah.

I: and what does the machine do?
M: sound...
I: for the baby? in what way does the machine help the baby?

M: how...because...if the baby wake up...or is crying...the machine...is.. eh..has...a soft music...for to making sleep again. **(1u/3cl) <2>**

speaking time: 5 minutes 30 ss

I:(directing the question to Serico) are you married? /S: yes/ would you like to have one of those for your family?

S: yes it would be a good idea but I don't have a plan for a baby now...but...I think it's...a good idea.. **(1u/2cl) <2>**

I: aah,you don't have any children...

S: no not yet...yeah but...you don't need to wake up to...(1.0) to put the baby to sleep again...
(1u/3cl) <2>

==========

TOTAL SPEAKING TIME: 5 min. 30 ss

==========

TOTALS : STAGE ONE
COMPLEXITY SCORES
MARCELA: 15 u 44 cl
SERICO : 21 u 45 cl

==========

ACCURACY scores
MARCELA: 24
SERICO: 31

==========

FLUENCY SCORES

	nº pauses	pausing time	replace	false starts	reform	repets
MARCELA	7	17 ss	1	2	21	2
SERICO	5	8 ss	1	0	7	1

DESCRIPTION STAGE TWO
CECILLE/MARIA

==========

(1)LIVING SCULPTURE

*CECILLE: I choose a decoration.. is for decoration..**(2.0)** is not really useful..is.. you can put it on the living room..hmm **(1.0)**..on the corner..back corner hmm **(1.0)** and play with it..it's. hmm...*

(1u/3cl) <3>

Maria: ..and plaay..
C: play with it.. yeah.. ***it's look like a bubble..***
M: uhumm..
*C: a black bubble..and i-t it gives you an (e)strange atmospheer when you look at it..and you want it tooo..**(1.0)** you know.. to go with..aah.. and try to touch it.. and then..when ..when you go there..and..**(1.0)** you touch it..there's a special..atmos..hmm special light..inside..hmm.. electron of eeh...how can I explain.. it's very nice..it's like eeh..give you an atmospheer. if you put on a camera..of black colour.. on the table..hmm there..just that light. .hmm.. it give you an atmospher ..*

(1u/11cl) <8>

M: it's like a light? ***(1u/1cl) <1>***

C: it's like a small.. yeah.. it's like a light..yeah.. ***it's a*** *bubble..glass bubble..with a* sog..*big* sog *you know from.. over a* sog..
(1u/2cl) <2>
M: uhumm..

C: and.. and if you touch it.. you've got a funny..eh light inside..you know.. who's moving..
(1u/3cl) <2>
M:yeah..
*C:and eh..**(2.0)** like an ..eeh...how I can (2.0)...hmm a spher it's a spher..yeah..and eh **(1.0)**..and..you've got..yeah..some electronic eeh..lights go hmm..all around the the spher..you know.*

(1u/2cl) <2>

M: uhumm
C:and..everytime you touch it.. everytime..you come..move and move the lights also..and try to-oo to make..uh.. funny.. funny.. picture.you know.. ***(1u/3cl) <3>***
M: funny..
*C: not picture...but funny..**(1.0)** like if you play with the light..you know..*
(1u/1cl)
M:> yes
C:you know what I mean.. ***(1u/1cl) <1>***

M:but it's just for decoration.?. ***(1u/1cl) <1>***

C:yeah..just for decoration..and..hmm it can give you a very funny at-atmospher..strange atmospher<M:yeah> very mysterious ..you know./.M:yeah../when you see the sphere..you know<M:uhumm>you wanted to see..what's the cause.<
(1u/5cl) <4>
M: it's very big..or no?
C:it's not very big..no../ M:it's like a balloon../ yeah..it's a spher..glass spher..and inside you've got a small<
M: >bubble
C:a small bubble..yeah..that light..who give.. that light

M: yes..
*C: and then.. if you put yours hands.. up..there are electronic **(1.0)**..eh.eh.static..*
(1u/4cl) <3>
M:yes..yes..I understand
(1u/1cl) <1>
2 min. 48 ss

(2)INFLATABLE BED

M: *well I choose...a..eeh hmm... yes.. I chose a bed..*
C:uhum.
M:but it's not..it's not..properly a bed ***(1.0)****..it's eeh..it's like hmm.I don't know..well it's ..for example..if you have* ***gwest night..*** *and you don't have another bed.. for them and you need one place for them to sleep and you don't have more beds left at home..is one special bed..that you inf..youu..****(1.0)*** *you just need inflate..the this thing..with a-ah* ***(1.0)****..hm.. with aa..hair drier or a vaccuum cleaner..*

(1u/10cl) <10>

<C: special..a special bed ..no?>
bed.! /C: what do you mean by special bed?. /..you know it's not normal..you..it's not..eehh../ ***(1u/1cl) <1>***

M:well the normal.. the normal beds..are..hard.. and you can..and you can put in one shelf for example the bed.. you know..

(1u/2cl) <2>

C: no..
M: the bed..<C: yeah> where you sleep..is is for good <C:(laughs)I know..> and is.. hard..so this one..<C:your bed..>

(1u/3cl) <3>

well the things that you put on.. I can show you..you have here the bed..<C:yeah..> and then you put here another thing..<C:yeah>and then you put..theee.. and you make the bed to sleep.. that night.. well..but.. this.. this one is not a real bed..it's just the thing..that where.. where you put yourrr.. body..where youu..sleep <C: yeah >

(1u/8cl) <8>

M: I don't know how to explain <C: yeah like a "matlass"> like a mattress..yes..that's right..mattress..
well but this mattress.. you can keep it on a shelf..or in a cupboard..because you just need ***to drier*** *.. to inflate..*
C: yaaah!
M: with a drier..with a hair drier..
C: yaah..
M: or with a vaccuum cleaner.. you put the vaccuum cleaner or the drier.. with a special thing..in.<C:uhmm..>in one hole..and then you ***push*** *and you inflate..and you have ehh..<C:and you* ***do*** *your bed..and..> yes and you have ready one bed for one of your friends.*

(1u/8cl) <8>

C: right.. OK..
M: and is ..very..is very.. useful and...it's very nice because when you don't have.. if you need one more bed.. you just take this one out.. out of thee..<C: out of the package..> yes.. that's right.. and then you take it and you ***do****..the new bed and when you don't need.. you put again.. in the cupboard and.. C: yah..ahh ..this kind of.. is it.****matress****..is that..?*
M:yes.. ***(1u/7cl) <5>***

==========

C: you can use it on the eeh beach..no?.. you know.>
M yees..yes that right.. but..
C: it looks like that..

M: yees..that's right
C: you know.. on the sea..
M: yes.. you can use it in the water..yes ..but it's different..
C: yeah it's different..
because that is because with this you sleep..
==========

*M: and.. it's very .. it's very nice because you don't.. it doesn't take very.. a lot of room..in the.. in the. **(1.0)**. in the drawer ..in the shelves.. so it's very small..*

C: it can be very small..

M: yes..when you.. when you put in thee..in the place ..yes.. it's very nice ..I think..and you can have also..eeh..buy sin-gle.. single bed.. or double bed...

(1u/3cl) <3>
two minutes forty five ss

C: hmmm..oh yeah..
M: small ..or bigger.. I think it's quite nice..
C: and then you put..sheet on..
M: yes.. like one..like a usual bed..yes.. I like this.
C: all right.. I think it's nice..it´s more useful than the square.. the correct size.. you can have in the living room
that one is not useful because you don't need to put it..you know.. on the floor..everywhere.. you can put it away..
==========
total speaking time: FIVE MINUTES 33ss
****

T O T A L S
DESCRIPTION STAGE TWO
FLUENCY

	nº pauses	pausing time	replace	false starts	reform	repets
CECILLE	9	12 ss	4	0	9	3
MARIA	4	4 ss	3	3	20	3

==========
COMPLEXITY SCORES
==========
CECILLE: 11 u / 38 cl
MARIA : 12 u / 47 cl
==========
ACCURACY ERROR-FREE CLAUSES
==========
CECILLE: 30
MARIA : 44
==========

DESCRIPTION : STAGE THREE
CECILLE/MAURO

ELECTRONIC GUARDIAN
CECILLE:I choose that ..uh electronic guardian..
Mauro: excuse me..

C: yes it's an.. two bit in an electronic box who's working with battery and.. you have to use it.. to..just to.. it's quite good.. ***(1.0)*** *for safety.. of your..luggage.. or precious..uh paper..*

(1u/5cl) <3>

really you wanted to keep on.. something..uh that little ..no..it's two little box.. who you put in your luggage..and /M: I put what../
in your luggage../M:on luggage/ ***(1u/2cl) <1>***

(1u/1cl) <1>

and.. yeah luggage.. and when he's.. when you're far away from your luggage.. about fif.. twenty foot.. feet.. twenty feet from your luggage.. then you..got a little.. teep.. teep going (laughs).. going . and you know you are far away..you know.. it just remind you.... you've got.. you know you've got.. if you've got two luggage.. you've got one and you forget one.. or somebody took it..

(1u/8cl) <5>

/M: where do you put.. this peep?../ in its uh your luggage..

(1u/1cl) <1>

in your luggage ..or you can.. you've got a possibility.. to just

pick it.. ***(1u/2cl) <2>***

/M:how big is it..?/ it's not look very.. actually.. I think like

(1u/1cl) <1>

uh your hands.. ***(1.0)*** *in size.. and maybe.. even smaller..* ***(1.0)*** *but it don't precise anyway here..but no.. I don't think so you have .. you don't have to be.. /M:yeah/*

(1u/4cl) <3>

it's just to remind you.. ***(1.0)*** *uh if somebody steal so.. stole your your luggage .. to remind you something happened .. you know.. it's a siñal.. alarm? alarm-siñal.. to say.. oh you are twenty feet.. from your luggage.. or somebody took it.. or you just forgot.. forgot about it../M:oh right/*

(1u/7cl) <6>

and they said.. it's uh it's quite useful.. if you're.. for example ..travelling or go in crowded place like.. aero-port.. station you know.. this kind of place.. so it's quite easy.. you know to hhmm ***(1.0)*** *forget something you know.. just don't think about it..*

(1u/6cl) <5>

one minute 47 ss

C: they say you can use also for.. ***(1.0)*** *working paper.. you want really to be safe..and you put that little siñal but it's not going anywhere..*

(1u/5cl) <4>

it's helping you uh ***(1.0)*** *to remember for example to take it.. you put in your luggage.. and you're doing something..and you said.. oh I have to take it later.. then you take the second part..you have you need these two parts with you.. because when they go in.. uh far*

away..(1.0) you know that's two boxes. then the siñal starts you see.. you see what I mean /M:the signal..then..yeah I see what you mean/ (1u/11cl) <10>

36ss = 2 min 23 ss + 3 min 10ss

==========

Total Speaking Time: FIVE MINUTES 33 ss

==========

NOT SCORED

.. you have to be together.. always together..or you put one with you and one with your luggage.. you have to be.. you have to be always with your luggage.. or you can put one in your two luggage then if you lose one of your luggage you know.. /M: yes/ then you've got the little alarm.. yeah.. it can be very useful.. for people who are travelling and move../M: you think it's very useful../ uuuh..
it's not..uh.. use--uh can helpful.. helpful.?./M:(laughs) yeah/
helpful for really travelling.but..it's not very useful.. you can
you.. know.. well I don't know..

Monitor: why do you think it's not useful?

Mauro: useful.. I don't know.. I think..
because.. sometimes I think.. if people were stu-pid.. I think..you know you can leave..
you can never lose .. your luggage

Cecille: make it an example for example for your shopping bag..you know..maybe if you forget one of your shopping bag
or if no.. you just..

Mauro.. there's two hands.. and I think a head..
Cecille: yeah.. I think maybe a bit silly for this kind of examples.. I think it is a little bit helpful for important papers .. or being at a re-u-nion.. or luggage..
Mauro: or maybe for an important

==========

TOTAL SPEAKING TIME:FIVE MINUTES THIRTY THREE SECONDS

T O T A L S
DESCRIPTION STAGE THREE
FLUENCY

	nº pauses	pausing time	replace	false starts	reform	repets
CECILLE	**9**	**9 ss**	**1**	**3**	**14**	**5**
MAURO	**5**	**8 ss**	**1**	**1**	**12**	**2**

==========

COMPLEXITY SCORES

==========

CECILLE : 16 u / 81 cl
MAURO : 15 u / 38 cl

==========

ACCURACY ERROR-FREE CLAUSES

==========

CECILLE : 64
MAURO : 35

==========

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FLUENCY-COMPLEXITY AND ACCURACY ***
NARRATION: STAGE ONE
GIOVANNA/ELIF

==========

G: ..sitting eeh outside a bar ..in a brasserie..

E: uhumm!
G: ..there is a man **(1.0)... <2>**(1u/2cl)

suddenly..another man **(2.0)**..eeh get..nearr him /E:yes/ annnd ..ask (h)im ..**if**.uuh **(1.0)** ..per..accident... **he lost a wallet.** **<1>**(1u/3cl)

E: ..accid..? ..is it night..or day? (1u/1cl)**<1>**
G: **it's during the day..** **<1>**(1u/1cl)
E: yes..
G: anyway...can I continue? **<1>**(1u/1cl)
E: aha..! yes.
G: ..and.. **the young man.. who is sitting**..aah..**(2.0)** on the table..**near the table**..uuh **(2.0)**
E: yes..
G: tell the other man...**thaatt the wallet..is really-y (1.0) ..(h)is**.. **<2>**(1u/3cl)
E: yeah.
G: **andd..thanks** a lot **..the other man**...about **he said..because.. (h)e (h)ad thought that....(h)ad lost eh..(h)is wallet**..very important for (h)im..
<3>(1u/4cl)
E: uhumm!
G: ..then..the tw..two men start talking...friendly..
<2>(1u/1cl)
E: ..**aah..yes..they know each other**..before ..no?
(1u/1cl) **<1>**
G: no .no..I am sure ..they never seen each other before.. /E:I see/ **<1>**(1u/2cl)
G: just..occasionally **because this man..found (2.0)** on the land(e) **..the wallet** /E:I see/..and
(h)e imagine ..that..it was..eeh../E:uhumm/ the other man.. so (h)e start..talking friendly(**1.0**)..a-and..spend..ten minutes..
E: uhumm!
G: ..talking each other **<3>**(1u/5cl)

the young man ..take (h)is wallet..anndd **(1.0)**..get.on a(**1.0**)..get in a van..annnd..**goes to dover**.. **<1>**(1u/3cl)

G: ...because eh..dover /E:ah..yes/ because (h)e going on (h)oliday to England...yeah **<0>**(1u/1cl)
E:huhumm.
G: (h)e's really (h)appy because (h)e found (h)is wallet

/E:yeah/..it's really important for (h)im
<3>(1u/3cl)

E: yeah..yeah.
G. uh..when they pass.. thee (**3.0**) ...aah I don't know...no..it's not frontier..the-ee frontier.(**1.0**) the frontier in dover... of course... the police..ask (h)im /E:yes/..if..(h)e (h)as something to declare..
<5>(1u/5cl)
E:uhumm.
G: (**2.0**)..and..he (h)as ..(h)is wallet a-and(**1.0**) ..into his (h)andsack..
E: I see...
G: ...inside..the-ee(**1.0**) ..not..nothing to declare...**but..the police (h)ad a look... at the wallet..he wanted to see..what..was in**...
E: uhumm.
G: ..and was heroin. <5>(1u/5cl)
E: I see.. it was terrible..and what did he do?..do you know? (1u/3cl) <3>
G:no..because I think..they..take (h)im (**1.0**) ..to the prison.
<2>(1u/2cl)

TOTAL SPEAKING TIME: 3 min. 22 ss
ELIF'S RETELLING THE STORY

Elif: eeh..two..one day..two (1.0)..the..the..situation is in the France. and ..eeh..during the day..eeh.
(1u/1cl) <0>

one man..is..in the coffee..and..he..had..a eeh..(2.0)another person.. .and they ..tttalk about ..something...eeh..and then they..eeh..they like each other and ehh hhe..wanted to go..eeh...(2.5)england for..for a holiday
(1u/5cl) <3>

..and later..a po-policeman came...and he (1.0) ..eehh wanted to see..his eeh..purse..and a (1.0) ..he didn't..want to show the purse...annnd then..later..he..the policeman..eeh.. (2.0) looked..at..his..purse..and.he..eh found...some heroin..and (1.0) ..that's all. (1u/5cl) <5>

SPEAKING TIME: 1 min. 25 ss
Nº Pauses: 7
Pausing time=10.5 ss
==========
=
Interviewer: what do you think happened?
do you think the man was actually carrying heroin?

Giovanna: per(h)aps.. I think so because..I think..when they was sitting uh..outside the bar /E:yes/**he was really. worried about (h) is wallet which he..had lost**/E:yeah/ because it was important for him to take the heroin to the.. england /

<5> (1u/7cl)

E: I see ..eeh..maybe **(1.0)maybe but.. I don't know . any-thing..(2.0) he didn't want..to..(1.5) sorry ..have this heroin**..and uh maybe some people want..(..*.)

(1u/4cl) **<3>**

20ss

G: put eh ..put the heroin inside../E: *the heroin yeah/ I don't think so **<2>**

(1u/2cl)

Inter viewer: would you like to look at the story and see if you see the same things...very quickly..

ELIF: uuh..maybe. /G: he's really happy to have found..the. / yes..uhumm..you're right..**you're right really..he knows**..

(1u/2cl) **<2>**

G: **it was.. a strike of luck**..too

.. ah peraps the man ..give the packet..the package

<1> (1u/3cl)

G: ah yes..**I think that when this man ..heard..that the guy was going to england..ask (h)im to take.. the package**... /E:and..because../ to make him a favor I mean.

<3> (1u/5cl)

.and so.. you're right/ E: I think / (1u/1cl)**<1>**

G:..and **perhaps he'd lost before**..the ..

<1>(1u/1cl)

/E: yeah no..no..he knows / (1u/1cl)**<1>**

G: I mean ..or perhaps..he take ..

/E: he takes him.. **and then he wants..uh--to take--some..uuuh -some package--for him..to england** /G: yes/..

and he asks something.. / (1u/3cl)**<2>**

G: (h)opin' that at the front-ier /E:yes../..they didn't check the package..because the guy....was.. with eh I think..with..a.. group holiday..so usually they don'stop uh at the frontier when you are in a group..or something like that..

<5>(1u/6cl)

E: and he was shocked (1u/1cl) **<1>**

G: yes of course because he was cheat about it..!

<0>(1u/1cl)

Interviewer: if something like that happened to you.. I mean if you lost..your purse..and somebody comes..and ask..is this..you know.. your purse?--you would be very grateful. What would you do ..and imagine this stranger asked you a favor? Are you going to England.. I have this parcel for some friends..would you please take it?

Giovanna: **I feel immediately ready** to make a favour the other person.because..he give give me..my my lost purse..so

<1>(1u/3cl)

ELIF:eeh..**(1.0)** I think I can say yes..because he or she gi-give me..m-my purse and uh I wanted to do something for him..
(1u/5cl) **<3>**
/G:because you feel grateful/ **<1>** (1u/1cl)

E:..yes..so..he's ..very well ..normal..but he has to think about it. (1u/2cl) **<2>**

G: the second time you think about..but the first time..!
<1> (1u/1cl)
What do you think will happen to this young man?

ELIF: **if he** eeh **can save him in this situation**..and the other thing..**if..policeman can understand the situation**..maybe he can be free..but eh he have he have had some problem now
(1u/4cl) **<1>**
../G:yeah..I think a lot of trouble/E: yes/ G: with the police../E: yes. **<1>** (1u/1cl)
30 **ss**

SPEAKING TIME: 2 min 25 ss

TOTAL SPEAKING TIME: FIVE MINUTES FORTY SEVEN SECONDS

T O T A L S
NARRATION STAGE ONE
T O T A L S FLUENCY
DESCRIPTION STAGE ONE

¡Error! Marcador no definido.	nº pauses	pausing time	replace	false starts	reform	repets
GIOVANNA	**16**	**23 ss**	**1**	**1**	**9**	**0**
ELIF	**8**	**11 ss**	**1**	**0**	**4**	**4**

==========

C O M P L E X I T Y
GIOVANNA: 26 C-units / 72 clauses
ELIF: 15 C-units / 40 clauses

A C C U R A C Y
GIOVANNA 53
ELIF: 29
==========

NARRATION: STAGE TWO
GIOVANNA/ELIF
==========

Elif: eeh.. **I'll tell you.. a story..eeh which is..eeh..about.. e-eh shopping**.. **<2>** (1u/2cl)

a woman...eeh..a young woman.. **she intends to go to a shop**..and **she..has a eeh (2.0)..a daughter who is..four..years old** eh..about four years old..annnd..eeh.she has..eh .a shopping lift..shopping lift?.. **<3>** (1u/2cl)

Giovanna:..I don't know..yes,..but..

E: sha-shopping car...a small car.. and (stutters) ttt-ake out things..**and suddenly she meets**..eeh to her frenz..
<1> (1u/2cl)
and ..eh..eh..he's..wit her....**at that moment he-er daughter.. took eeh.. one wine**..and eeh..eh..he..he's.. a bit naughty and **ss-she p-put the wine** in a ...(h) er bag... **in hher mother's handbag**... you see. (1u/2cl)
<2>
G: instead of ...
E: no..no..no..**her mother .d-d-doesn't know**...you see
<1> (1u/2cl)
G: ah..ya...
E: **and then...th-.they say ba..bye**...then when they...p-pay money...and then...when they..they...uh w-w-went...o-out..**a woman who works..in shop**..she came..and..she say..**you didn't pay for eh this wine..** **<3>** (1u/7cl)

G: but did they buy anything else..? in the shop(e) ?
(1u/1cl) **<1>**
E: ...yes...th-they bought..other thingz...
<1> (1u/1cl)
G: yes...and the mother..put(e) I think...this thing(e)..in the big bag(e)... (1u/1cl)**<0>**

E: ah..yes...yes
G: ...but(e)...sheee...
E: ...no...eeh **(2.0)**...her..**her...mother..d-didn't know..the d-daughter did something naughty**..and eeh...her daughter.. tooks.. bottle of wine.. and she...p-puts.. in her mother's friendz eeh...eh h-handbag...not shopping bag /G:hmmm/..so she..didn't know.. **<1>**(1u/5cl)
G: yes
E: and eh **(1.0)** then...th..**they have to call police**...and th..they would have problem... **<1>** (1u/2cl)

G: **yes, of course...because** eeh.../E: yes like..a shoplifter/

<1> (1u/1cl)

the..**the police...think(e) that they...(e)steal..the-ee bottle**...

(1u/2cl) <2>

E: ...ah...may be..they could..explain thee...

<1>(1u/1cl)

G: ...the situation...after...but..it is eeh..very very trouble..

(1u/1cl)<0>

(COMMENT:ALTHOUGH ELIF STUTTERS A LOT I DID NOT CONSIDER HER STUTTERING PART OF PAUSING TIME ALL THE TIME.. ALTHOUGH THERE OCCASIONS WHEN SHE STUTTERS AND DEFINITELY PAUSES..THOSE HAVE BEEN INCLUDED IN THE COUNTING.)

ELIF'S SPEAKING TIME: 2 mln 45 ss

I: could, could you retell the story?

G: yes...I..I try...(laughs).

>> so..eeeh...**there is a-aa**...young young...man(e)..**young woman**...eeh..**with a girl**(e) eeh child(e)...about eh...four year old(e)...that(e) are doing(e) shopping...in a supermarket(e). **(1.0)**..

(1u/4cl) <1>

at a certain moment...thee..the mother eeeh **(2.0)** meet a friend of her...and so they...keep(e)...talking...meanwhile...the little child...**(1.5)** who is a bit naughty...eeh...take a bottle of wine ..and eeh put(e) this bottle...in...the bag of (h)er mother's friend...

(1u/5cl) <2>

so...theyyy finish doing shoppin'...they talk(e)...and eh...**when(e) they are going out...the supermarket(2.0)**...eh **some-body** stop...them(e)...check(e)and.. (E: yes...)..**found(e) this wine...in the bag** (h)and...of her..her mother friend...and they call immediately the police..**because...of course...they think...they (h)ave/E: a shoplifter/(*) ..stealing the bottle...**

(1u/11cl) <4>

GIOVANNA'S SPEAKING TIME : 1 mln 11ss

G: is it correct?

E: yeess, eeh would you like to see...(offering her to take a look at the picture story)

I: what do you think will happen?

==========

EVALUATING THE POSSIBLE OUTCOME

E: ...eeh

Giovanna: **well..I think that they will...accept...theee (1.0)..the explanation.**

(1u/2cl) <2>

Elif: ...but...I think...eeh...eeh...eh **(1.0)**..nowadays...every p-people..eeh....**most of the people (h)are so poor** and th-thee eh shop..has...th..ank n' suppose they taught...their children to...take.. **(1.0)** wine or..and of course...when... they...

eeh...explain..or when they(**1.0**)eeh...then...when they(**1.0**)have eh c-caught...or something like that...it will be eeh ok...but...they will have...problem.

<1> (1u/9cl)

Giovanna: yes...but in in this case...I think...that **(2.0)** this eeh woman...doesn't to seem **(1.0)**...I mean...a person...eh...

(1u/2cl)<0>

E: ...a shoplifter...

G: yeah.. a shoplifter.. **so I think the police will understand**...what(e) (h)as (h)appen. **(1u/3cl) <2>**

E: and what..do you think.. the sh-shop k-keeper.. eeh eh eh notice.. her ..I'm not sure.. **<2> (1u/3cl)**

Giovanna: no... of course..of course not.. **but.. In this situation**..eh **(1.0) I think**..I mean..**I would understand**...**I don't know the police peraps..you're right.**

(1u/4cl) <4> E: ..eeh...y-y-yes ..but the police..must be careful..eeh..

<1> (1u/1cl)

G: I suppose...eeeh..is it..**I think..it's eeh..e-embarassing** situation /E:uhumm/... for this woman..but I mean..eeh **she has done nothing** ..(laughs)hah ..soo.. **(1u/3cl) <2>**

E: I hope...he will have..eeh..situation..

G:you are..just..because of your..her little child.. eh.. **so..I think.. the police ..will understand.** **(1u/2cl) <2>**

E: yes...the child..needs.. some..eeh..eh..eh (miming 'scolding')

<1> (1u/1cl)

G: yeah (laughs).

2 min. 2ss

==========

TOTAL SPEAKING TIME 5 min. 13 ss

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T O T A L S FLUENCY
NARRATION STAGE TWO

	nº pauses	pausing time	replace	false starts	reform	repets
GIOVANNA	**8**	**12 ss**	**2**	**0**	**9**	**3**
ELIF	**7**	**10 ss**	**1**	**0**	**8**	**2**

==========

C O M P L E X I T Y
GIOVANNA: 13 C-units / 39 clauses
ELIF: 15 C-units / 40 clauses

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A C C U R A C Y
GIOVANNA: 28
ELIF: 22

PROBLEM-SOLVING :STAGE THREE
ELANA/ROSA

DECEPTIVE PICTURE

Rosa: I can see a window..it's a biew..

Elana: is what ?
R: a biew
E: what is a biew?
R: a biew is a "panoram"..
E: ..a view?. you mean
R: yes.. I see..'view'.. (trying to imitate Elana's pronunciation) (laughs)..pronunciation..

STARTING POINT

R: yeah ..it's a panoram .. and I think..it's ehh.. ***(1.0)***
I think.. it's not from now.. I think ..it's from maybe.. fifteen years..ago.. or something..it's..
(1u/3cl) <3>

I can see a lot of houses.. I can see the roof.. and I can see a passenger a passenger.. along.. narrow way.. I can see uh uh two.. ***(1u/3cl) <2>***

I think.. there are two people.. there .. they are talking... I can't see there.. because they are too small.. maybe I don't know if they are people.. or maybe they print it..(laughs)
well.. I can see there is a big window..and I can see the sky.. there are a lot of clouds..
(1u/8cl) <7>

47 ss

Monitor.. is there anything in that picture that attracts your attention as strange..?

R: hmm.. yes..maybe .. there is a..(1.0) a big.. building here.. that .. is very close to the window..because in.. normally all of them.. there are uh ver.. quite far..but there is one here.. that is.. just is..just very close to the window I think..just appear.. like../E: uhumm/ I don't know.. but it's put there....and the rest.. there are a lot of trees..

25 ss

Monitor:why don't show it to Elana?

R: what do you think..?

E: aha..

Monitor: what attracts your attention Elana?

R: the building no?
E: no not the building.. the street.. the street between the..
R: what do you think that? ..two people or..just the bridges

E: what's strange about this.. I think..it's from.. eeh.. it's uh very high..for example.. if we are here.. it's uh very high.. we are on the top of a building..

what's strange about this.. that suddenly this.. /R:yes../ this house.. I don't know.. if it's a castle or something../R: building/.. stuck../R:. stuck../ yeah..stuck out.. that's really strange.. because..the.. if you look..I mean uh..because..
if it was real.. if it was real.. this house should be smaller.. I think so..

(1u/9c1)

<7>

R: yeah..

29 ss

E:.yeah.. it should be smaller..
R: but.. I think ..it's very.. it's very close..
Monitor: perhaps.. it's simple higher..
E: no.. even though.. even though..but it seems something.. unusual about it.. yeah ..even if it is higher..

Monitor..it's perfectly possible to be looking from a higher window..

E: I think it's strange..
R: I think ..I think it's very close from the window.. I think it doesn't looks..
E: it must be very close ..that's strange.. but I like the street here..it's look..
R: it's it's nice the landscape... lanscape.. yeah..
E: look.. it's very nice..
R: yeah..

Monitor:what is inside the room..

E: inside.. the room../R:curtains../
E: oh no no..how do you call that.. yeah.. curtains as well ..but that I forgot how to call this..not a trolley..no no no..

==========

R: what was that ?
E: I don't know..
R: what is it for..? ***(1u/1c1) <1>***
E: what's that for.. to open the window..?
(1u/2c1) <2>
R: to lift the window..

E: it's something to do with the window.. that I'm sure..

R: is to open it.. maybe? ***(1u/2cl) <2>***

E: to open it.. well.. but how are you going to open it.. with that?

(1u/5cl) <5>

R: yeah I don't know what's that.. even in my language.. I don't know what's that..so I can't say.. I don't know what this is for.. I never saw something like that..

(1u/5cl) <5>

E: yeah.. it's a bit complicated.. it's something to do with opening the window? do you think..? no.. it can't be..

(1u/4cl) <4>

30 ss

R: it's something to.. or maybe you can use to.. to put the clothes when you take it out..believe it.. like a chair..
E: no but what's that really... no good imagination..

Monitor: is there anything else?

E: what in the floor..
Monitor: no!

R: the curtains..very dark curtains.. I think..
Monitor: what you see there and you don't know what it is..is connected with a part that's on the top..

R: ah with that one..
E: it must be the part of the top of the window.. it must be connected..

Monitor: no that's not part of the window..it's part of the rest of that thing that is on the floor..

E: I don't understand..
R: I think.. this is a thing that's it's for..to to put up..the window..

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Monitor: no..that's what painters use..

E: yes I know exactly.. what's that.. but.. how do you call that?..when when you put the picture..

(1u/4cl) <3>

R: I don't know..
E: that's that's like.. to link the picture..something to link the picture..I don't know if you say to link. but.uh .yeah..but.. what what's that.. to do with that.. that is what I don't understand..

(1u/7cl) <6>

R: I don't know..what..
E: wait..just a minute.. well that's a picture.. just a minute..just a minute
R: what..?

E: I think.. that.. that's a picture!
R: ah yes..
E: the window.. all the scenery.. you see here.. it's a picture.. with the window.. you know..you know.. what I mean..
R: yeah.. yeah.. I know what you mean..
E: that's a picture it's not a window.. but the shape.. definitely

(1u/7c1) <6>

R: I know what you mean.. ***(1u/2c1)<2>***

48 ss

TWO MINUTES 34 ss

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R: the limits.. yeah they are here..
Monitor: it's not easily detectable.. because you have here..
it should be like that ..shouldn't it.
E: you mean that part is the..wasting you mean..
Monitor.. no I mean.. there is.. ther has to be.. a frame for that picture..
Elana: that's the frame..
Monitor: no.. that's the window..
E: that's the window.. but that's the picture..
Monitor: no the picture is here.. this is the picture here..it goes.. here.. and then goes down.. and then it goes there again..

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NEW STARTING POINT

Monitor:.. the problem is it's very hard to see the limits.. because the picture has limits.

R: well it's not very clear..that..
E: so what do you mean.. only this is part of the picture..and the rest is oh..
R: the rest is the landscape..

(1u/2c1) <2>

E: it's the real.. ***(1u/3c1) <3>***

R: and the rest of the landscape..
E: oh.. I understand what you mean.. do you understand Rosa..
R: yeah yeah yeah..yeah I do..

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E: ooh.. that's very special.. I think.. that's a very special.. painting.. you have to be very....eh ac-surate? or.. I don't know..
R: how do you say it..?

E: you have to be very careful..because you have to match exactly..look that's real one.. that's painting.. so you should..be....go together.

R:that's the painting.. she wants.. to.. to match..
to go together.. yeah.. exactly... ' ac-accurately' is the word.. accurate-ly.. yeah.. I think so..
E: it's quite difficult.. I think it's quite.. ***(1u/8cl) <7>***
R: yeah.. ***(1u/4cl) <4>***

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DECEPTIVE PHOTO

Monitor: okay.. Rosa... what do you see?

Rosa:I can see a man.. flying in thee..in the space..(laughs)

(1u/2cl) <2>

Elana.. in the space..! (with a bit of skepticism)

R:I think.. heee.. ***(2.0)*** *he's in danger (laughs).. he's going to fall down..I think he threw out.. by.. the uh plane..*

(1u/3cl) <2>

E: I think yeah .. from the aeroplane I think..maybe.. yes.. maybe is a pilot..

(1u/2cl) <2>

R: no.. I think... he doesn't look a a pilot../E:no!/ I think.. maybe somebody.. ***(1.0)*** *I mean somebody who was at the back..* ***(1u/2cl) <2>***

E: maybe it was a disaster..or something in the aeroplane..and eeh eh../R:yeah/ he falls ..because..

(1u/3cl) <3>

R: yeah.. he falls..

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E: yes.. you can say that..uhumm +
R:I think. he is a.. ***(1.0)*** *hmm*

E: could be uh water too.. no?..no..it can't be uh water ++
R: no..I think . it can't..for the..
E: but I think it's definite..from very high..eeh +

R: very high..eeh

Monitor: what makes you believe that?

E: ha..because of the clouds..+

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(NOT SCORED)

R: for the clouds ..yes..
E: because it's clouds..it's exact..oh.. it's in.. actually..
*it's in the clouds..**(1.0)** you can see him*
(1u/7c1) <7>

R:..because he's hiding more or less..

E: is what?
R: hiden.. hidding..

E: hiding.. what do you mean?

R: well..hiding.. eeh.. he's between the clouds..
(1u/2c1) <2>

E: is.. yeah ..yes hiding /R: hiding/..with.. the clouds.. it must be on a high high place..
(1u/3c1) <3>

very high..

R: with the clouds.. yeah
must be from a (h)aeroplane..something
(1u/1c1) <1>

30 ss

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Monitor: are you sure ..those are clouds..?

E:..no.. I mean..it's.. could be..
R: it seems.. to be a cloud..
E: it seems like a cloud..but I think I think..it's could be also ..a sea. no it can't be a sea .. if it was a sea..
if it had been sea.. ***(1u/4c1) <4>***

R: I think he's falling down...and he's..it's the sky..
he's falling down I think he throw out..by the plane ..
that's my first impression.. ***(1u/4c1) <3>***

E: I think here..can you see this..it's possible.. here is the water.. you know... maybe the cloud it's too low..
I think the cloud is too low..
(1u/6c1) <6>

*R:or maybe..or maybe..**(2.0)** could be that..*
that's the sea... and that's the cloud.. *and eeh.. it's going to..*

E:and by the way..the.. they took the picture.. it's look as thee..it's half..half on the clouds and half on the sea..

R: but..I think..I think maybe..it's a ..it's a disaster... because..if he he's going to to sea.. he doesn't wear tha that clothes..wasn't he?..because the clothes.. it..seems to be..in a in a..hol.. in a cold place..'cause he's wearing a lot of clothes..and warm clothes..

(1u/8c1) <8>

E: that's a strange picture....it seems to be in the clouds..

R: because look at that.. and the clouds..
E: what it could be.. or cloud or sea..but it's not sea I mean..

(1u/4c1) <3>

2 min. 31

could be sea.. I mean.. if he fell from..
from the (h)aeroplane.. so he can fell on the sea.. but..it doesn't look.. if it.. was..
R: or maybe.. or maybe..
E: you could sea the water splashing..you know.. because it's half way..

(1u/4c1) <4>

R: ah..but.. yeah..

Monitor: if you had a larger picture..

R: look at that..I think he is in the..
E:..maybe it is snow..could be snow..
R: I think.. it's ice..
E: yes.. could be snow.. could be ice as well..yes..yes..
R: yeah..I think..he.. he attraps..the ice..
he attraps the ice..but not eeh..

(1u/3c1) <2>

E: it u-uh..could be.. **(1.0)** a lak..a lek.. a lake..
R: lake..
E: in winter..+
R: ah..
E: so half..it's frozen and half it's not..yes.. you see here..
but it isn't frozen..here it's.. frozen..

(1u/4c1) <4>

R: yeah.. it's frozen..+
E: yeah.. could be that.. and what about the man..what's he's doing there..(laughs)++
R: that's strange..! what's he doing there?

(1u/3c1) <3>

E: that's very strange..(laughs).. may-be...he's rescue.. somebody..he's going to rescue somebody.. I don't know..

(1u/5c1) <5>

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maybe he's looking for gold.. I don't know..or what..(laughs) yeah.. it could be..
R: he's going to be a millionaire ..there..
E: I don't know..
R: or maybe..he's doing..any any reporter (meaning.."documentary")
E: no.. no.. I think.. the way the way..he wear..ehmm .yeah..
R: the we..the way..
E: ..he dress.. you look look at this..the shoes..special shoes..
R: yeah...
E:..so I think he's looking for something..
R: yeah..
E:he must.. he must be.. yeah.. be looking for something..
R: yeah..
E:..maybe.. someone.. is missing..so..they are researching..
R: yeah..
E: something like that..yes..
R: or.. may be he's doing..a a reportage..
E: yes..yes..
R:or something.. and he's looking for something..
E: could be....and we said 'a disaster'.. what a shame..(laughs)
R: (laughing) it could..be!.. I don't regret what I said about that..
E: no..no.. you are using your imagination.. I mean.. if it can be..maybe ..you're looking at something else.. but everyone's got his own idea
R: of course
E:..own own..is.eeh..
R: own thoughts
E: yes..
R: own feelings..
E: yeah..different opinion..but now I mean.. it's looks as it's really is ..a lek..(meaning "lake) or something..and half is frozen.. half is not..
R:yeah.. yeah..
E: it's not... clear.. no..I mean.. yeah
R: yeah..
Monitor:pictures.. do give you that sensation..an illusion of one thing which is not there..
E:..yes.. it's very nice..

****

TOTAL SCORES

TOTAL SPEAKING TIME : 5 min. 8 ss

FLUENCY

	n° pauses	pausing time	replace	false starts	reform	repets
ROSA	6	8 ss	1	0	13	9
ELANA	3	3 ss	1	2	21	2

COMPLEXITY

```
==========================================
ROSA   :     16 c-units /   55 cl.

ELANA  :     17 c-units /   80 cl.
==========================================
ACCURACY:  Error-free clauses
==========================================
ROSA   :                        50

ELANA  :                        74
==========================================
```